

A UNIFIED ACCOUNT
OF THE SYNTAX OF VALENCE IN JAVANESE

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This dissertation proposes a unified account of the syntax of valence in Javanese which includes applicative, passive and adversative passive. The three valence-changing processes have been commonly analyzed as separate phenomena in the previous frameworks. The dissertation shows that independent analyses on the syntax of valence by Baker (1988), Marantz (1993), and Pylkkänen (2002) on applicative, Kratzer (1996) and Collins (2005) on passive, and Kubo (1992) and Pylkkänen (2000) on adversative passive are problematic for Javanese. First, the frameworks cannot provide sufficient argument heads for all of the three functions of suffix *-ake*: benefactive, instrumental, and theme. Second, they cannot explain the three positions of the passive agent: preverbal, postverbal and in a PP at the end of sentence. Third, they cannot explain the fact that Javanese adversative passive has no possessor raising construction.

I propose that the problems can be solved with a unified account of the syntax of valence of Javanese. This is done by incorporating the frameworks of Bowers (2010) on applicative and passive, Merchant (2013) on passive, and Aldridge (2011) on ergativity. Based on Bowers (2010), the three functions of suffix *-ake* can be accommodated at separate argument heads. Moreover, based on the same framework, the agent can be originated at the agent head at the bottom of the derivation, and then raised to the preverbal and the postverbal positions due to the ergative features at the positions. Lastly, the adversative passive is defined as a combination of passivization

with a specific adversative passive *ke-* merged at the Spec of Voice and the applicative suffix *-an* merged at the Affectee head.

BIOGRAPHICAL SKETCH

Ika Nurhayani had her B.A. in French Language and Literature from Gadjah Mada University in Yogyakarta, Indonesia in 1998. She had a Master degree in humanities from the same university in 2006. In 2008, she was awarded a Fulbright Presidential scholarship for a Ph.D study in the U.S. She went to study at Cornell Department of Linguistics and earned her M.A. in 2012. Her interests are on phonology, morphology and syntax. During her graduate study at Cornell University, she worked as a teaching assistant for Introduction to Linguistics and Introduction to Southeast Asia. She currently works as a faculty at the Department of Cultural Sciences, Brawijaya University in Malang, Indonesia.

I dedicated this dissertation to my loving parents, Bambang and Nuriawanti.

“Mikul Dhuwur Mendhem Jero”

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LIST OF ABBREVIATION

Act	Active
ACC	Accusative
Adv	Adversative
Appl	Applicative
AOR	Aorist
ASP	Aspect
CP	Complement Phrase
Ben	Benefactive
Cau	Causative
Det	Determiner
EMPH	Emphasis
EPP	Extended Projection Principle
ERG	Ergative
FUT	Future
GEN	genitive
Inst	Instrumental
Loc	Locative
NN	Non-nominative
NOM	Nominative
OBL	Oblique
OP	Operator
PAn	Proto Austronesian
PART	Particle
PMP	Proto Malayo-Polynesian
PRF	Perfective
Pass	passive
Poss	possessive
Prog	progressive
REL	Relative
Sing	singular
TRANS	transitive
VP	verb phrase

CHAPTER ONE

INTRODUCTION

1.1 Background

In this dissertation, I offer a unified account of the syntax of valence in Javanese. I also show that previous frameworks on the syntax of valence are problematic for Javanese because they offer separate independent analyses for applicative, passive and adversative passive.

I begin by describing valence changing processes in Javanese. The processes are done with verbal suffixes which can change the number of arguments controlled by the verb. They include applicative, passive, and adversative passive.

Applicativization is done by suffix *-i* and suffix *-ake*. The suffix *-i* introduces a locative argument.

(1) Applicative suffix *-i*

a. *Pardi ng-irim duit marang Ani*

Pardi act-send money to Ani

‘I sent money to Ani’

b. *Pardi ng-irim-i Ani duit*

Pardi act-send-Appl.Loc Ani money

‘Pardi sent Ani some money’

c. *Ani di-kirim-i duit dening Pardi*

Ani pass-send-Appl.Loc money by Pardi

‘Ani was sent some money by Pardi’

d. ***Duit** *di-kirim-i* *Ani* *dening Pardi*

Money pass-send-Appl.Loc Ani by Pardi

‘The money was sent to Ani by Pardi’

In (1b), the goal of the action *ngirimi duit* ‘send the money’, *Ani*, is introduced to the sentence with the addition of suffix *-i* to the verb. *Ani* becomes the core object of the sentence as seen by its ability to be the surface subject of the passive sentence in (1c) while the theme *duit* ‘money’ is ungrammatical in the same position in (1d).

On the other hand, the suffix *-ake* has multiple functions as benefactive, instrumental and theme suffixes.

(2) Benefactive *-ake*

a. *Pardi n-jupuk buku kanggo Tono seka perpustakaan*

Pardi act-pick book for Tono from library

‘Pardi picked a book for Tono from the library’

b. *Pardi n-jupuk-ake Tono buku seka perpustakaan*

Pardi active-pick-Appl.Ben Tono book from library

‘Pardi picked a book for Tono from the library’

c. ***Tono di-jupuk-ake*** *buku seka perpustakaan dening Pardi*

Tono act-take-Appl.Ben book from library by Pardi

‘Tono was picked a book from the library by Pardi’

d. ****Buku di-jupuk-ake*** *Tono dening Pardi seka perpustakaan*

Book pass-pick-Appl.Ben Tono by Pardi from library

‘The book was picked for Tono by Pardi from the library’

(3) Instrumental *-ake*

- a. *Pardi m-alang lawang ngganggo kayu*
Pardi act-bolt door with wood
'Pardi bolted the door with wood'
- b. *Pardi m-alang-ake kayu neng lawang*
Pardi act-bolt-Appl.Inst wood to door
'Pardi bolted the door with a wood'
- c. *Kayu di-palang-ake Pardi neng lawang*
Wood pass-bolt-Appl.Inst Pardi to wood
'The wood was bolted by Pardi to the door'

(4) Theme *-ake*

- a. *Siti n-awa-ni Marni dagangan-e*
Siti act-offer-Appl.Loc Marni merchandise-poss
'Siti offered to Marni her merchandise'
- b. *Siti n-awak-ake dagangan-e neng Marni*
Siti act-offer-Appl.Theme merchandise-poss to Marni
'Siti offered her merchandise to Marni'
- c. *Dagangan-e di-tawak-ake Siti neng Marni*
Merchandise-poss pass-offer-App.Theme Siti to Marni
'The merchandise was offered by Siti to Marni'

The suffix *-ake* is also used in causative construction to introduce a causer agent.

(5) Causative *-ake*

Pardi nibak-ake Ani

Pardi act-fall-Cau Ani

‘Pardi made Ani fall’

Furthermore, there is one more suffix, the suffix *-an*, which I argue later in the dissertation as an applicative suffix. The suffix is used in an adversative passive with prefix *ke-* to add an affectee who suffers from the action described by the verb.

(6) Adversative passive with suffix *-an*

a. *Jangan-e wutah.*

Soup-def spill

‘The soup spilled’

b. *Marni ke-wutah-an jangan*

Marni adv-spill-Appl soup

‘Marni was accidentally spilled the soup’

In (6a), the accusative verb *spill* is in an active voice. On the other hand, with the addition of suffix *ke-*, the verb is now in an adversative passive and an affectee *Marni* is added. It can also be observed that the agent in the adversative passive is not obligatory.

I now discuss Javanese passive which is characterized by the three different positions of the passive agent in the derivation.

(7) The positions of the passive agents

a. *Parto di-silih-ake buku seka perpustakaan **dening Ani***

Parto pass-borrow-Appl book from library by Ani

‘Parto was borrowed a book from the library by Ani’

b. *Parto di-silih-ake **Ani** buku seka perpustakaan*

Parto pass-borrow-Appl Ani book from library

‘Parto was borrowed a book by Ani from the library’

c. *Parto **tak**-silih-ake buku seka perpustakaan*

Parto 1stSing-borrow-Appl book from library

‘Parto was borrowed a book by me from the library’

It might be argued that (7c) is merely a fronted theme argument. However, this is not the case since the theme argument behaves like a nominative subject with its ability to be relativized. As pointed out by Arka and Manning (1998), relativization is an exclusive subject property in Indonesian and is not allowed for a topicalized object. I show in chapter six that this is also the case with Javanese.

1.2 Problems of the Previous Framework

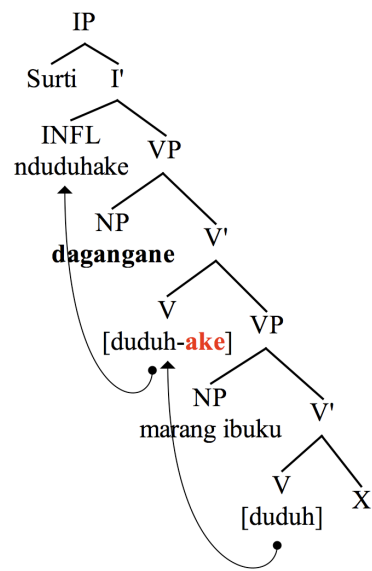
Unfortunately, previous frameworks cannot offer a satisfying account for the Javanese valence changing processes. I start first with frameworks on applicative. Baker (1988) proposes preposition incorporation, arguing that the applicative morpheme is originated from a preposition incorporated to a verb. On the contrary, Marantz (1993) argues that the applied morpheme is introduced by an applicative head. Following Marantz (1993), Pylkkänen (2002) further separates the applicative

head into a high and a low applicative. The high applicative denotes a thematic relation between an applied argument and the event described by the verb while the low applicative denotes a transfer of possession relation between two individuals, asserting that the direct object is to the possession of the indirect object (Pylkkänen, 2002: 15).

I now discuss the problems of the applicative frameworks. Baker's (1988) framework does not have any applicative head and this is problematic for suffix *-ake* with its multiple functions. Marantz's (1993) framework is an improvement of Baker's (1988) by providing an applicative head for the applicative suffix to merge. Nevertheless, its single applicative head cannot accommodate the multiple functions of suffix *-ake*. It can be argued that the functions can be lumped in the single applicative head. However, this will result in the violation of UTAH (The Uniformity of Theta Assignment Hypothesis) of Baker (1988) since the theme argument has to be merged in two different positions at the derivation, at the theme head for the theme marker applicative as seen in (8) and at the applicative head for the benefactive applicative as seen in (9).

(8) Theme Marker

<i>Surti</i>	<i>n-duduh-ake</i>	<i>dagangan-e</i>		<i>marang</i>	<i>ibu-ku</i>
Surti	act-show-Appl	merchandise-Poss	to	mother-my	
'Surti showed her merchandise to my mother'					

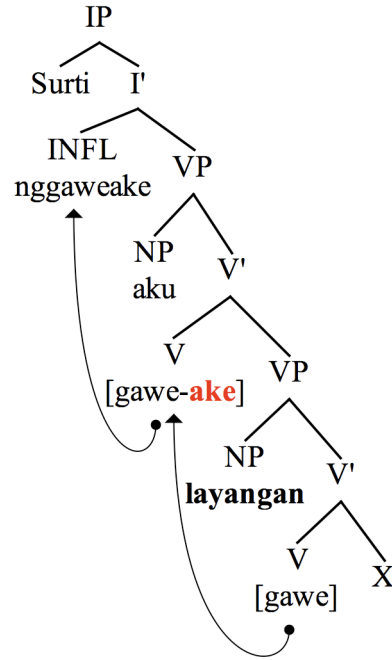


(9) Benefactive Applicative

Surti ng-gawek-ake aku layangan

Surti act-make-Appl me kite

‘Surti made me a kite’



Pylkkänen's (2002) framework is also problematic since the suffix *-i* and *-ake* display the traits of both high and low applicatives. Since Pylkkänen (2002) argues that a low applicative involves a transfer of possession of the theme argument from the agent to the applied argument, the applicative does not work for a construction in which the theme argument is absent such as those with unergative verbs and implicit object. Hence, a construction with an unergative verb or implicit object is only applicable for the high applicative. In contrast, the high applicative is incompatible with a context that involves a transfer of possession.

(10) Low applicative with implicit object construction in English

- a. Yesterday, I cooked.
- b. *Yesterday, I cooked him (intended reading: I cooked for him)
- c. Yesterday, I cooked him something

Based on (10), English has a low applicative since it is compatible with a transfer of possession in (10c) but not with implicit object construction in (10b).

However, Javanese suffixes *-ake* and *-i* display both characteristics of a high and a low applicative by (i) combining with unergative verbs and implicit object construction, and (ii) having a transfer of possession reading.

(11) Suffix *-i* with high applicative trait: unergative and implicit object construction

a. Unergative

Asu kuwi ng-uyuh-i tanduran lombok

Dog that act-urinate-Appl plant chili

‘That dog urinated on the chili plant’

b. Implicit Object Construction

Parto nge-ter-i Ani wingi

Parto act-deliver-Appl Ani yesterday

‘Parto delivered (something) to Ani yesterday’

In (11), the suffix *-i* shows traits of a high applicative by combining with unergative verb in (11a) and implicit object construction in (11b). However, the suffix also appears to be a low applicative enabling a transfer of possession reading in (12).

(12) Suffix *-i* with low applicative trait: transfer of possession

Parto nge-ter-i Ani paru goreng wingi

Parto act-deliver-Appl Ani lung fried yesterday

‘Parto delivered some fried lung to Ani yesterday’

In (12), the theme argument *paru goreng* ‘fried (beef) lung’ is intended to be of the possession of the applied argument *Ani*.

The high-low applicative traits can also be seen in suffix *-ake*. First, it can combine with unergative and implicit object construction like a high applicative suffix.

(13) Suffix *-ake* with high applicative trait: unergative and implicit object construction

a. Unergative

Aku n-donga-ake Parti

I act-pray-Appl Parti

‘I prayed for Parti’

b. Implicit Direct Object Construction

Aku lagi n-jangan-ake bapak

I prog act-cook -Appl father

‘I am making soup for father’

In (13a), the suffix *-ake* is compatible with unergative while in (13b), it is compatible with implicit object construction.

Moreover, the suffix can also result in a transfer of possession reading in (14).

(14) Suffix *-ake* with low applicative trait: transfer of possession

Aku ng-gawe-ake Pardi omah.

I act-make-Appl Pardi house

‘I made Pardi a house’

In (14), the theme argument *omah* ‘house’ is intended to be of the possession of the applied argument *Pardi*. Clearly, the high and low applicative framework is problematic for Javanese applicative suffixes *-ake* and *-i*.

Furthermore, the three frameworks have a common weakness in that they make little attempt to account for the seemingly complementary distribution between the applicative construction and its thematic paraphrase. As an example, Marantz (1993) offers two different derivations for the applicatives. This is problematic for Javanese since the goal applicative *-i* and the theme marker *-ake* can have a complementary distribution in a construction with similar argument structure.

(15) The complementary distribution between the suffix *-i* and *-ake*

a. *Surti n-duduk-i ibu-ku dagangan-e*

Sarinem act.-show.Appl.Goal mother-my merchandise-poss

‘Surti showed my mother her merchandise’

b. *Surti n-duduk-ake dagangan-e marang ibu-ku*

Surti act-show-Appl.Th merchandise-poss to mother-my

‘Surti showed her merchandise to my mother’

In (15a), a goal applicative with suffix *-i* is used to introduce the goal argument *ibuku* ‘my mother’. In contrast, in (15b), the theme applicative *-ake* is used to focus on the theme argument *dagangane* ‘her merchandise’. However, although the two sentences

have different applicative suffixes and word orders, they basically represent the same argument structure. *Surti* is the agent, *dagangane* ‘her merchandise’ is the theme, while *ibuku* ‘my mother’ is the applied argument. It is clear that the two constructions need to be represented with a virtually identical structure.

I now discuss briefly the problems of the previous frameworks on passive. As we see in (7), Javanese passive agents can be located in three different positions in the derivation. Unfortunately, previous frameworks on passive, in specific those of Kratzer (1996) and Collins (2005), can only account for the *by-phrase* passive. Legate (2010) tries to solve the problem by moving the theme DP above the verb to account for similar preverbal agent in Indonesian. However, in doing so, she cannot explain the positions of the postverbal agent and the PP agent.

Lastly, I discuss the problems on the frameworks on adversative passive. In this dissertation, I treat the adversative suffix *-an* as an applicative suffix. Javanese adversative poses a challenge on previous frameworks of adversative passive. First, the suffix *-an* seems to be an adversative parallel of suffix *-i* in the regular passive as observed by Davies (1995).

(16) Javanese adversative passive with suffix *-an*

- a. *Pardi ke-ambruk-an empring*

Pardi Adv-fall-Appl bamboo

‘Pardi was accidentally fallen over by a bamboo’

- b. *Pardi di-ambruk-i empring*

Pardi Adv-fall-loc bamboo

‘Pardi was intentionally fallen over by a bamboo by someone’

In (16a), the suffix *-an* results in an adversative passive while a seemingly parallel structure with suffix *-i* in (16b) yields a regular passive. However, not all verbs with *-i* can be converted into adversative passive with *-ake* and this indicates that the suffix *-an* is not an adversative version of the suffix *-i*. Furthermore, Davies (1995) claims that Javanese adversative shows a case of split intransitivity since it is prohibited for unergative verbs. However, this is not the case since unergative can also be converted into adversative passive as can be seen in (22).

Second the suffix *-an* poses a challenge for the previous analysis of a type of adversative construction widely known in the literature as possessor raising (Kubo, 1992).

(17) Javanese possession adversative

- a. *Pardi ke-ilang-an dompét*
 Pardi Adv-disappear-Appl wallet
 ‘Pardi suffered of his wallet disappeared’
- b. **Pardi ke-ilang dompét.*
 Pardi Adv-disappear wallet
 ‘Pardi suffered of his wallet disappeared’

Example (17a) shows a structure in which *Pardi*, the subject of the passive, is the owner of the theme argument *dompét* ‘wallet’. The suffix *-an* is obligatory as seen by the ungrammaticality of (17b). The possessive relation prompts Pylkkänen (2000) to claim that adversative passive reflects her high-low applicative distinction, with possessor raising as a low applicative construction.

However, in Javanese, the subject of such construction does not always have a

direct possession relation with the theme argument. In fact, (17a) can indicate that the wallet is of possession of someone else other than *Pardi*, and he was holding it for that person when the theft happened as seen in (18).

(18) Javanese possession adversative

Pardi ke-ilang-an dompet-e Ani

Pardi Adv-disappear-Appl wallet-Poss Ani

‘Pardi suffered of Ani’s wallet disappeared (when he was holding it)’

In sum, the problems of the analysis of the previous frameworks are listed below.

Applicative		
Baker (1988)	Marantz (1993)	Pylkkänen (2002)
There is no applicative head to merge the multiple functions of suffix <i>-ake</i>	The multiple functions of suffix <i>-ake</i> must be lumped in one head and results in the violation of UTAH due to the different positions for the theme argument. For the benefactive <i>-ake</i> , the theme is merged at the lower VP while for the theme <i>-ake</i> , the theme is merged at the higher VP	The suffix <i>-i</i> and suffix <i>-ake</i> shows both traits of high and low applicative, by their compatibilites with unergative, implicit object construction and transfer of possession reading.
The applicative construction and its thematic paraphrase are represented with totally different structures. This is problematic for the complementary distribution between the suffix <i>-i</i> in a goal applicative and the suffix <i>-ake</i> in a theme applicative.		
Passive		
Kratzer (1996)	Collins (2005)	Legate (2010)
The frameworks can only explain the PP agent		The framework can only explain the preverbal agent
Adversative Passive		
Davies (1995)	Kubo (1992)	Pylkkänen (2002)
Not all verbs with <i>-i</i> can be converted into adversative passive with suffix <i>-an</i> . There is no split intransitivity since	Possessor raising does not exist in Javanese since the theme argument is not obligatory. Moreover, the theme argument does not have to be of the possession of the affectee.	

unergative can also be made into adversative passive.	
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Table 1. Problems of the previous frameworks

1.3 New Approach

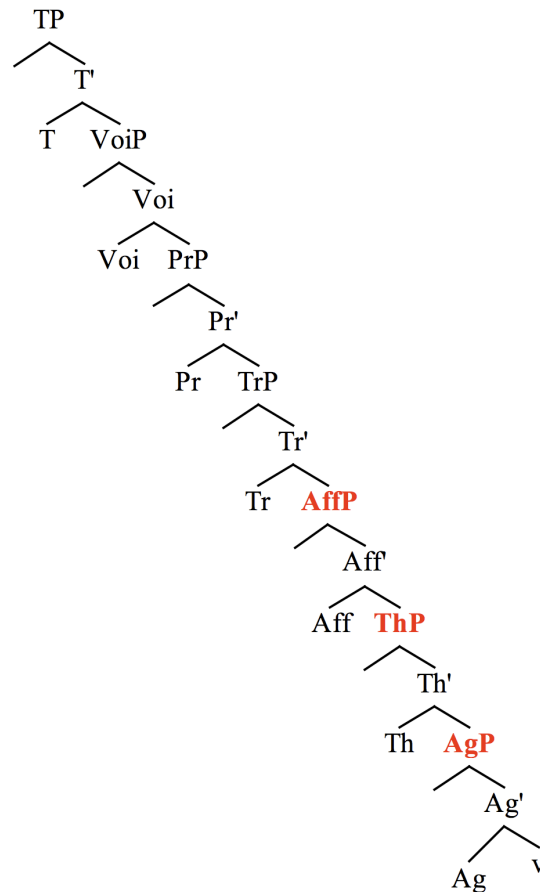
It can be seen from 1.2 that previous frameworks have independent analyses for applicative, passive and adversative passive. This results in the following problems for Javanese:

- (i) the high and low applicative traits of Pylkkänen's (2002) framework displayed by the suffix *-i* and *-ake*,
- (ii) the lack of virtual similar representation for the applicative construction and its thematic paraphrase,
- (iii) the lack of multiple heads for the multiple functions of suffix *-ake*,
- (iv) incomplete account of the three positions of the passive agent
- (v) inaccurate account on the identity of suffix *-an*, the split intransitivity, and the possessor raising in the adversative passive.

I propose that the problems can be solved by a unified account of the applicative and passive in Javanese. This is done with frameworks of Bowers (2010), Merchant (2013), and Aldridge (2011). In Bowers' (2010) applicative framework, each argument can be merged in separate projections according to the semantic roles of the arguments. This solves problem (i) because identical suffixes do not have to be classified under unnecessary distinction and problem (iii) because all of the three

functions of suffix *-ake* can be merged in multiple argument heads.

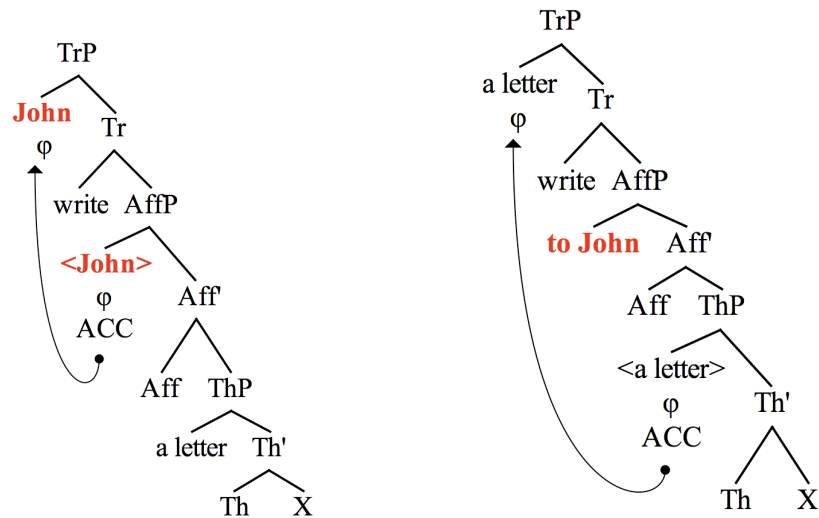
(19) Multiple argument heads in Bowers' (2010) framework



Furthermore, Bowers' (2010) framework can also solve problem (ii) because in his framework, the argument head can select a DP with an unvalued case feature and a PP. When an applied head selects a DP, it will receive an accusative case and will result in an applicative construction. On the other hand, the selection of a PP by an applied head will result in a thematic paraphrase and the theme will receive an accusative case instead.

(20) C-selection of argument heads in Bowers (2010) framework

Mary wrote John a letter



Applicative Construction

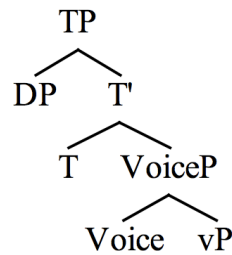
Thematic Paraphrase

Problem (iv) can also be solved by Bowers' (2010) framework on passive. In the framework, the agent head is merged at the bottom of derivation as seen in (19). I posit that all agents in Javanese originate at the low Agent head in line with Bowers' (2010) framework. The agents then move to a preverbal or position motivated by features. I propose that the feature is ergative case based on Aldridge's (2011) framework in which she claims that similar phenomenon of the three positions of the passive agent in Indonesian is caused by the remnant of ergative syntax in the language. In the preverbal-agent passive, both the subject of the passive (the theme argument) and the 'demoted' agent show traits of subject hood. As Aldridge (2011) points out, this is due to a previous ergative syntax in which the agent is marked as

ergative. As the language shifts into accusative, the ergative trace is still visible in the passive. Hence, I posit that the preverbal and postverbal positions have ergative features that should be satisfied by moving the Agent DP from the Agent head to the two positions.

In addition, I use Merchant's (2013) framework in which he claims that the Voice Phrase is merged high in the derivation below TP. I discuss in chapter six how this framework is convenient to explain the position of the preverbal agent.

(21) Merchant's (2013) Voice Phrase



In sum, I propose that the three positions of the passive agent in Javanese can be solved by: (i) originally merging it at the agent head at the bottom of the derivation, (ii) having it raised to the preverbal and postverbal positions with ergative feature, and (iii) merging the VoiP high below the TP to account for the preverbal agent.

Finally, I show that a unified account of applicative and passive can solve the problem of adversative passive in (v). Rather than treating the suffix *-an* as an adversative counter part of suffix *-i* as Davies (1995) claims, I propose that the adversative passive is a combination of adversative passivization with the adversative

suffix *ke-* and applicativization with suffix *-an*. With this analysis, intransitive verbs, whether unergative or unaccusative, can be converted into adversative passive with the applicative suffix *-an*. The constraint lies on whether or not the verb has a high degree of volition or has a high possibility to inflict unintended consequences to the affectee.

(22) Unergative + unintended consequences

- a. *Parto m-lumpat.*

Parto act-jump

‘Parto urinated’

- b. *Pardi ke-lumpat-an Parto*

Pardi adv-jump-Appl Parto

‘Pardi was accidentally jumped on by Parto’

(23) Unergative - unintended consequences

- a. *Ani n-joged.*

Ani act-dance

‘Ani danced’

- b. **Siti ke-joged-an Ani*

Siti adv-dance-Appl Ani

‘Siti was accidentally danced on by Ani’

In (22), the adversative passive is compatible for the verb *lumpat* ‘to jump’ because although the action is volitional, it has the potential to cause unintended consequences to the surrounding of the agents. However, in (23), the verb *joged* ‘dance’ has less potential to cause unintended consequences to the surroundings since the agent has to perform the dance volitionally with specific target audience in mind.

Hence, the adversative passive is grammatical for (22) but not for (23). Moreover, it is clear now why possessor raising is inexistence in Javanese because there is only one type of adversative passive with the applicative suffix *-an*.

1.4 Field work and data collection

In the dissertation, I mostly use my own judgment as a native speaker of Javanese to provide data. However, to ensure that the data is accurate, I made attempts to verify my judgment with those of other native speakers with field works. For this purpose, I conducted two data collections: (i) in Yogyakarta, Central Java, in June 1-31, 2010 and (ii) in Yogyakarta, Central Java, and in Malang, East Java, in June 15-30, 2012 and in July 10-30, 2012. The data was collected with speech recording to elicit natural language use and grammatical elicitation to provide more straightforward syntactic data. The first data collection involved ten language participants who were asked to do the following tasks: (i) telling simple short stories in Javanese, (ii) telling longer stories in Javanese, (iii) translating sentences in Javanese, and (iv) judging grammaticality of sentences in Javanese.

On the other hand, the second data collection only involved six language participants to provide more time to interact with them. Malang, East Java was included to provide an insight into the syntax of the East Javanese dialect. Moreover, the language participants were asked to do the following tasks:

- (i) describing pictures in Javanese
- (ii) performing back translation and paraphrasing to verify the accuracy produced by the language participants in (i)

(iii) judging the grammaticality of sentences in Javanese.

1.5 Methodology

In the dissertation, I did not use any specific method to analyze the data. I applied targeted frameworks of applicative, passive, and adversative passive to the Javanese data. Upon finding out that the frameworks did not work on the data, I then looked for possible reasons and solutions of the problems. In order to do that, I employed not only synchronic frameworks on syntax and morphology, but also diachronic and comparative resources. I used diachronic frameworks to investigate the functions and nature of applicative and passive affixes in Proto-Austronesian and Old Javanese. I also used comparative data of applicative from neighboring languages, Indonesian and *Tukang Besi*, to see if their applicative suffixes have similar functions to Javanese. Indonesian was chosen because of the similarity of its syntax with Javanese to show that Javanese applicative behaves like other closely related languages. On the other hand, *Tukang Besi* was chosen to represent conservative Austronesian languages to show that Javanese applicative behaves like other Austronesian languages in general.

1.6 Transcription

In this dissertation, I use Roman orthography for Javanese which is mostly phonemic and based on Indonesian. Following Indonesian, the vowels /ə/, /e/, and /ɛ/ are transcribed with one orthography, e. Similarly, vowels /o/, and /ɔ/ are transcribed

with one orthography, o. In addition, retroflexes /ʈ/ and /ɖ/ are transcribed into t and d.

Ortography	IPA
a	a
i	i
u	u
e	e, ɛ, ə
o	o, ɔ
b	b
c	ç
d	d, ɖ
g	g
h	h
j	j
k	k, ʔ
l	l
m	m
n	n
ny	ɲ
ng	ŋ
p	p
r	r
s	s
t	t, ʈ
y	j

Table 2. Ortography

1.7 Organization of the dissertation

The rest of the dissertation is organized as follows:

- (i) Chapter 2 presents a historical and sociolinguistic overview on Javanese.
- (ii) Chapter 3 presents a grammatical sketch of Javanese syntax.
- (iii) Chapter 4 is a diachronic and comparative review of the Javanese applicative.
- (iv) Chapter 5 discusses Javanese applicativization.
- (iv) Chapter 6 discusses Javanese passive.
- (vi) Chapter 7 discussess Javanese adversative passive.
- (vii) Chapter 8 is the conclusion of the dissertation.

CHAPTER TWO

A HISTORICAL AND SOCIOLINGUISTIC REVIEW ON JAVANESE

2.1 The history of Java and the Javanese

The Javanese people are descendants of the Austronesians who migrated from Southern China around five thousand years ago to Southeast Asia via Taiwan and the Philippines. The Austronesians took the wet-rice cultivation technology along with their migration, increasing the capacity of large settlements and the emergence of states in their new colonies, the archipelago that is now Indonesia (Drakeley, 2003: 8). Therefore, it is not surprising that the major classical Javanese states thrived on their strong rice agriculture, exporting rice to the neighboring states. Moreover, the region benefited from its strategic location for sea trade and the monsoon wind which expedited sea travels on China-India route (Lockard, 2009: 17) and as a result, the Javanese states were also known for their extensive international trade (Brown, 2003: 18).

(24) The map of Indonesia



<http://www.state.gov/p/eap/ci/id/>

In addition, the classical Javanese states are celebrated for their architectural and literary achievements. The first known major Javanese state, the Hindu-Buddhist Mataram kingdom (8-11th century CE) built monumental temples and produced masterpieces of Old Javanese literature such as the *Arjunawiwaha* and the *Mahabarata* (Brown, 2003: 22-24).

Moreover, the Javanese states were politically important in the region, exerting their influences as far as mainland Southeast Asia. The biggest Javanese kingdom, Majapahit (13th - 16th century CE) had vassal states as far as the Philippines and New Guinea and the mainland of Southeast Asia was under its protection (Brown, 2003: 26). The empire gained its wealth from its trade with China and monopoly of the spice trade.

The spread of Islam through trade in the archipelago brought little changes to the Javanese courts. The new Islamic Mataram kingdom (17th century CE), although incorporating Muslim forms and symbolism, continued to perform practices of its

Hindu and Buddhist predecessors (Brown, 2003:37). The era marked the height of the *priyayi*, a hereditary aristocracy administering the court. The *priyayi* was regarded as having a very strongly developed set of values and norms stressing status and etiquette, refinement and self-control (Brown, 2003:38).

The arrival of a European power, the Dutch company VOC in the 17th century had serious impact on Mataram and the Javanese. Exploiting internal conflicts in the kingdom, the VOC offered support to beleaguered Mataram kings in exchange for monopoly, territory, or right to built bases in Java (Brown, 2003: 59). Gradually, the once great kingdom was divided into four small states, two of them in Solo and the rests in Yogyakarta, Central Java by the 19th century. The *priyayi* of the Javanese courts continued to wage fruitless sporadic wars against the Dutch, but the courts were finally absorbed into the colonial state.

The Javanese once again played an important part in Indonesia at the end of Japanese colonialism in Indonesia in 1945. Sixty-two Javanese became a part of the BPPKI (The Investigation for the Preparation of Indonesia's Independence) which formulated the draft of the state constitution. With the Indonesian constitution on hand, Sukarno -a Javanese- and Hatta proclaimed Indonesian independence on August 17th 1945 (Suryadinata, 2002: 10-11).

Nowadays, the Javanese makes up about 40.6 % of Indonesia's 248, 645, 008 based on July 2012 census (CIA.gov). They dominate the key positions in the military and the government. In the 1970s and 1980s, Javanese held 70% key positions in the military. Moreover, all Indonesian presidents have been Javanese except B.J. Habibie (1998-1999) who nonetheless is a half Javanese (Suryadinata, 2002: 3-4).

(25) The map of Java

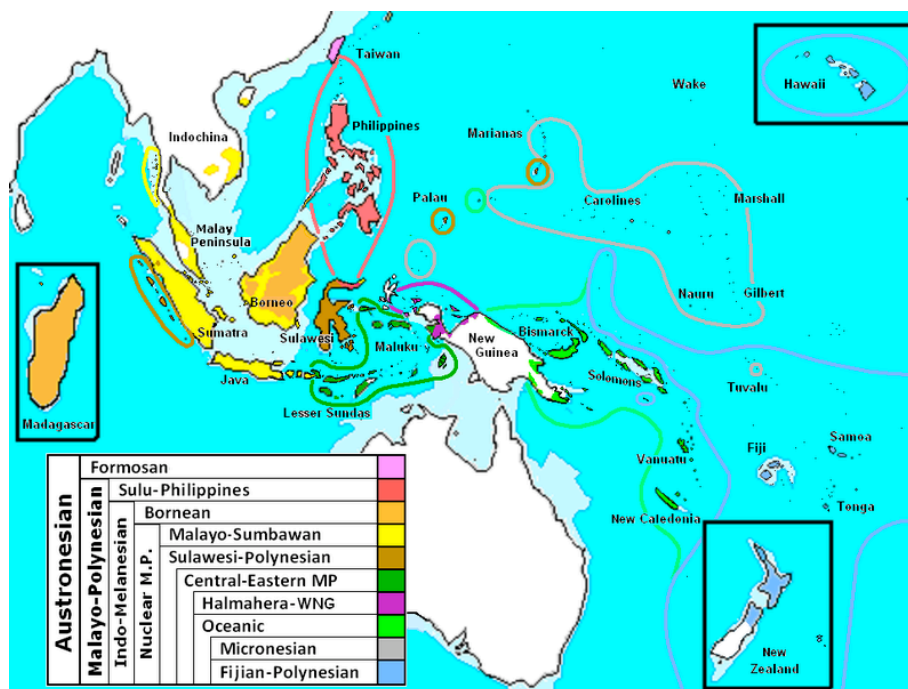


<http://www.lmp.ucla.edu/images/javanese.gif>

2.2 Javanese within the Austronesian language family

The Austronesian language family is the largest existing language family in the world in terms of the number of its member languages. Its 1200 languages make up 20% of the world's languages. It is also the second most geographically spread language family after Indo-European, spoken from Madagascar in the west Indian Ocean to Easter Island in the southeast of Pacific Ocean, and from Taiwan and Hawaii in the northeastern Pacific to New Zealand (Adelaar, 2005).

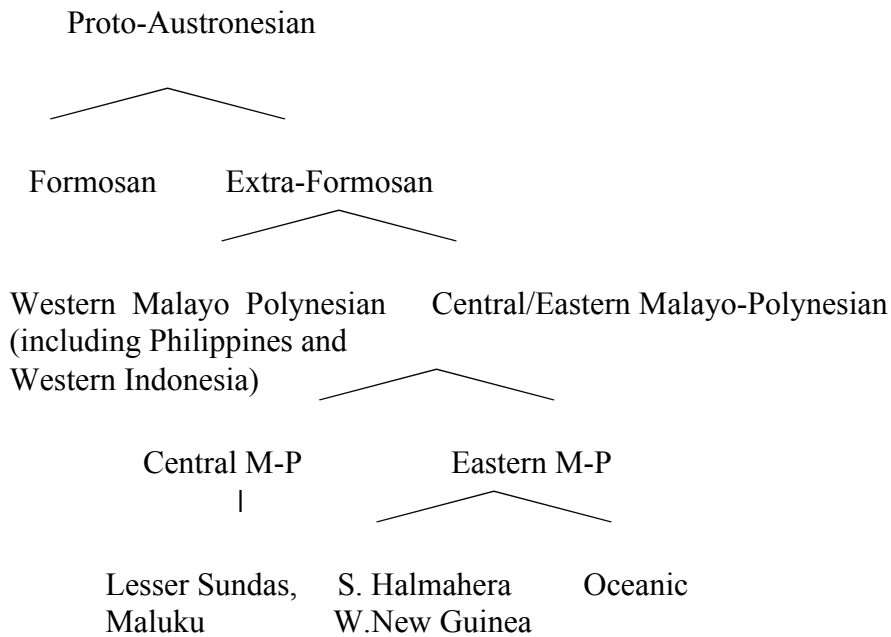
(26) The distribution of the Austronesian language family



http://en.wikipedia.org/wiki/File:Austronesian_languages.PNG

The Philippines, Brunei, Polynesia, Micronesia, Melanesia, Indonesia and Malaysia are Austronesian-speaking (Adelaar and Himmelman, 2005). Indonesian languages fall into the Malayo-Polynesian subgroup of the Austronesian family.

(27) The Austronesian language family



(Pawley and Ross 1993).

Javanese is spoken by 84,300,000 people in Java and its surrounding islands (ethnologue.com). Among the Austronesian languages, Javanese has the highest number of mother-tongue speakers. Equally, it is the most important regional language in Indonesia and has an important impact on Indonesian, the national language. Due to the political expansion of classical Javanese kingdoms, the language has also left its marks on other regional Indonesian languages and parts of the Philippines. The Javanese speech levels are imitated by Sundanese, Madurese, Balinese and Sasak with vocabularies borrowed from Javanese. The Palembang Malay court jargon is based on the Javanese lexicon while Javanese loanwords are adopted by Banjar Malay and by more distant languages such as Siraya in Taiwan and Malagasy in Madagascar (Adelaar, 2005).

2.3 Javanese Speakers and Dialect

The Javanese people is the biggest ethnic group in Indonesia and consists of 40.6 % of Indonesia's 248, 645, 008 based on July, 2012 census (CIA.gov). The majority of Javanese live on the island of Java, Indonesia. Though speaking a similar language, Javanese people and culture are in no way homogenous. There is a great regional diversity in terms of food, household rituals, folk arts and music (Koentjaraningrat, 1985: 21). The diversity is reflected in the language in the form of dialects.

The first distinct Javanese group is the Banyumas people in Central Java who speak a very distinct Banyumas dialect. The Banyumas people are known for its remnants of archaic forms of social organization, unique life cycle rituals, and typical forms of folk arts (Koentjaraningrat, 1985: 21).

The second group is the Yogyakarta-Solo people who speak of what is regarded as the standard Javanese dialect because of their positions as the capitals of the Javanese courts. Yogyakarta and Solo are known for their court civilization with centuries old literature and a sophisticated art of court dances and music. The area is also characterized by its highly syncretistic religious life, combining Hinduism, Buddhism, and Islam (Koentjaraningrat, 1985: 21).

The third group is the north coast people of Cirebon, Indramayu, Tegal and Pekalongan in West Java, Kudus and Demak in Central Java, and Gresik in East Java. Unlike the syncretism in the Javanese courts, Puritan Islam dominates the north coast areas, which is shown from their culture and literature (Koentjaraningrat, 1985: 21).

The fourth group is the Surabaya dialect in East Java. The area is characterized

by various Muslim Javanese reform movements in the past century. (Koentjaraningrat, 1985: 22). Beside the four major dialects, there are two isolated dialects, Tengger, spoken on the caldera of the Tengger volcano and Osing, spoken in Banyuwangi and Blambangan, the eastern tip of Java (Koentjaraningrat, 1985: 24).

Through migration, a number of Javanese can also be found in Sumatra and the Malay Peninsula. Dutch colonialism also brought the Javanese as far as South Africa, Suriname, Curacao and New Caledonia to work as slaves or plantation workers (Koentjaraningrat, 1985: 25).

(28) The distribution of Javanese language in Java



http://upload.wikimedia.org/wikipedia/commons/8/82/Java_languages.JPG

2.4 The history of the Javanese language

Now I discuss the history of Javanese language which includes Old Javanese, Middle Javanese, and Modern Javanese. The three periods of Javanese are based on Javanese manuscripts found in Bali. Before the arrival of Islam in the Indonesian archipelago, Java was influenced by Indian culture through trade and the religious mission of Hinduism and Buddhism. The Indian connection in Southeast Asia dates

back as early as the first century with the extension of Roman sea trade with southern India to Southeast Asia (Mallaret, 1959: 52).

The first attested Old Javanese is on a charter dating from 804 AD (Arps, 2000: 187). In addition to official texts, the language is also preserved in old manuscripts from the islands of Bali, Lombok, and Java in Indonesia. However, the majority of the manuscripts were found in Bali and the adjacent island of Lombok. Balinese resisted Islamization and kept the old Javanese literary and religious tradition which in Java was altered to adapt to Islam. In fact, the history of Old Javanese literature in Java became obscure after the end of the last Hindu-Buddhist kingdoms c 1527 (Ricklefs, 2002: 62).

The lexicon of Old Javanese is heavily influenced by Sanskrit though its morphology and syntax remain Austronesian (Arps, 2000: 187). This is not surprising since Javanese texts developed via a systematic adaptation, sometimes translation of Sanskrit works over a six-hundred year period from the ninth or ten century. Sanskrit begins to die in Java the moment Old Javanese begins to live (Pollock, 1996: 644). This is evidence that the people of Java are certainly not passive recipients of cultural transmission. As in other parts of Southeast Asia, particular aspects of Indian culture have been adopted, rejected or transformed according to the needs of the indigenous people (Pollock, 1996: 644). It is not clear when the Old Javanese texts ceased to be read or copied in Java. However, Old Javanese was still studied at Javanese courts in the eighteenth century (Ricklefs, 2002: 62).

Middle Javanese is problematic. In fact, Pollock (1996: 644) claims that there is no neat succession of Old, Middle, and Modern Javanese. Zurbuchen (1976) argues

that the distinction of Old and Middle Javanese is mainly geographical (Java and Bali) and not chronological since the language used in Middle Javanese literature is similar to that of Old Javanese. Zoetmulder (1974: 35-36) lumps together as Old Javanese all texts in Javanese lacking Arabic loans or Islamic influence. Middle Javanese is found in *kidung* (songs) and consists primarily of romanticized legends concerning the age of Majapahit kingdom in Java. Unlike Old Javanese texts, which are mostly based on Indian themes, Middle Javanese songs are mostly based on Javanese settings. Beside songs, Middle Javanese works also include religious texts (Ricklefs, 2002: 66).

New Javanese emerged after the collapse of the Hindu Indian culture in Java due to the demise of Majapahit, the last important kingdom in Java. The members of the Javanese court then fled to Bali, bringing with them the Indianized Javanese culture. The New Javanese literature built on the previous literature but incorporated Islamic ideas. The literature flourished in the court cities of Yogyakarta and Surakarta into the nineteenth century. Modern Javanese begins at the twentieth century with novels written on Javanese in the 1920. However, the literature of Modern Javanese is more limited than those of the previous stages of Javanese (Fergusson, 2008: 1369).

I now compare some of the linguistic features of Old Javanese and Modern Javanese. Old Javanese is much closer to its Austronesian roots than Modern Javanese. It has VSO word order (McWhorter, 2007:239) and retains productive affixes such as infixes *-um-* (*santwa* ‘respect’, *sumantwa* ‘treat with respect’ (Teselkin 1972: 43) and *-in-* (*pangan* ‘eat’, *pinangan* ‘to be eaten’ Teselkin, 1972: 44). It also retains markers of argument structure such as the actor marker *de* which is used when the actor is not in the subject position (McWhorter, 2007:238-239).

(29) Old Javanese

Ya ta cinakraken de bhatara Visnu ring daitya

EMPH EMPH hit.TRANS actor Lord Visnu OBL discus

‘Lord Vishnu hit (the giant) with the discus’

(Teselkin, 1972: 43)

Old Javanese is also rich in left periphery particles, such as particle *pwa* and *ta*.

(30) Old Javanese Particles

a. *Katon pwa mahurip sang Kaca de nikang Daitya,*

See PART live the Kaca by the Daitya

prihati ta yamet upaya

sad PART look for solution

‘The fact that Kaca was still alive was seen by Daitya, he became sad, and looked for another solution.’

(Zoetmulder, 1976: 87)

b. *Alawas pwa sang kala mijil ta rare laki-laki*

Long PART time born PART child man

‘After a while, was born a baby boy’

(Zoetmulder, 1976: 87).

Modern Javanese has since changed into SVO word order. The infixes *-um-* and *-in-* remain in the lexicon but have become unproductive. The actor marker *de* has turned into a preposition *dening* heading an agent in a passive construction. Moreover, the language has lost its left periphery particles.

(31) Modern Javanese

a. *Paimin lagi maca layang kabar*

Paimin Prog read newspaper

‘Paimin is reading newspaper’

(Subroto, 1994: 35).

b. *Layang kabar kuwi lagi di-waca dening Paimin*

Newspaper that Prog Pass-read by Paimin

‘The newspaper is being read by Paimin’

2.5 Speech Levels

Politeness is a very important feature in Javanese culture and is expressed through the language with speech levels, which show proper degree of respect and formality between the speaker and the addressee. The greater the degree of respect and formality in an utterance is, the greater the politeness shown (Poedjosoedarmo, S., 1968).

There are three major speech levels in Javanese: *ngoko*, *madyo* and *kromo*. *Ngoko* is a non-polite, informal level used to address someone with whom the speaker is very familiar. *Madyo* is the semi polite and non-formal middle level. *Kromo* is the highest level. It is polite and formal and used to address someone toward whom the speaker must be distant and formal (Poedjosoedarmo, S., 1968). Errington (1998) adds that “whenever two people meet they should ask themselves, who is this person, who am I, what is this person to me”.

However, the speech levels are in no way rigid as Errington (1998: 11)

describes:

The complexity of speech level structure make it easy to overlook the dynamic fluidity and potential for latent expressiveness of speech level use and to overlook also the kinds of expressive switch between levels that may occur in a single interactive encounter and a single utterance.

Speech levels are incorporated in both morphology and lexicon and mostly affect function words and the basic core of vocabulary.

(32) Javanese speech levels - lexicon

Menapa nandalem mundhut sekul semanten? Krama

Menapa panjenengan mendhet sekul semanten? Krama

Napa sampeyan mundhut sekul semonten? Madya

Napa sampeyan njupuk sega semonten? Madya

Apa sliramu njupuk sega semono? Ngoko

Apa kowe njupuk sega semono? Ngoko

Q word 2nd person take rice that much

‘Did you take that much rice?’

(Errington, 1998: 90-91)

	Ngoko	Krama
Passive 1 st person Sing 2 nd person Sing 3 rd person	dak-/ tak- + V kok- + V di- + V	kula panjenengan/sampeyan dipun- + V
Possessive 1 st person Sing 2 nd person Sing 3 rd person	N + -ku N + -mu N+ [n]-e	kula panjenengan/sampeyan N+ [n]-ipun
Applicative Benefactive	-ake	-aken

Table 3. Javanese speech level: morphology

(Adapted from Dwiraharjo, 2006: 415)

Nowadays, the use of Javanese speech levels has declined significantly due to the popularity of the national language, Indonesian. Indonesian is a standard form of Malay spoken in Indonesia. The language started as a lingua franca in the Indonesian archipelago since the tenth century, at the height of the Srivijaya kingdom (Nababan, 1979). At the beginning of the twentieth century, independent movements from the Dutch colonialists gained momentum in Indonesia. The nationalists were searching for national identities and they chose the lingua franca to unite an archipelago with diverse ethnic groups and languages. The choice was remarkable due to the fact that most of the nationalists were Javanese. However, they realized that Javanese was far too complicated to be a national language due to its elaborate speech levels and hence their choice for the much simpler version of Malay spoken in Indonesia at that time. Nowadays, Indonesian is a highly successful national language. As G. Poedjosoedarmo (2006: 112) points out, Indonesian is virtually the only choice for official, formal, or impersonal communication throughout the archipelago. It has been the primary language of education, public administration, mass media and the primary language for communication between different ethnic groups of different linguistics background.

The success of Indonesian has threatened the nation's 719 languages. As a matter of fact, 13 languages have already become extinct (ethnologue.com). Javanese with its millions of speakers is far from extinction. However, its speech levels, especially the high level, suffer greatly from the massive popularity of Indonesian. G.

Poedjosoedarmo (2006) observes that more people including the educated ones confuse the usage of the three levels. Moreover, younger generation have much lesser knowledge of the high level vocabulary than their parents or grandparents. In fact, realizing their poor mastery of the speech levels, they simply switch to Indonesian in context where it is necessary to be formal and polite.

2.6 Summary

The Javanese people are the descendants of the Austronesians migrated from Taiwan. The ancient Javanese survived on agriculture and international sea trade. The international contacts have left important marks on Javanese culture, religion and language.

Javanese is the largest ethnic group in Indonesia and has played an important role since the independence of the nation. Most Javanese live in Central and East Java where the Javanese courts located. The present Javanese courts, Yogyakarta and Solo, are absorbed into the nation of Indonesia but have maintained their roles as the centers of Javanese culture.

The Javanese speaks Javanese, an Austronesian language under the Malayo-Polynesian subgroup. The oldest form of Javanese is found in a charter dating from 804 AD. Old Javanese lexicon is heavily influenced by Sanskrit, due to the spread of Hinduism in the region, but its morphology and syntax remain Austronesian.

The language has several notable geographical dialects: Banyumas, Yogyakarta-Solo, North Coast, Surabaya, Tengger and Osing. In addition, the language also displays elaborate speech levels to show respect and formality between

its speakers. The speech levels include *ngoko* (informal, non-polite), *madyo* (semi-polite) and *kromo* (the most polite).

In this dissertation, all the data come from the low level speech, *ngoko*, based on Yogyakarta and Solo dialects.

CHAPTER THREE

GRAMMATICAL SKETCH: A BRIEF REVIEW ON JAVANESE SYNTAX

In this chapter, I give a brief review of those aspects of Javanese syntax related to the applicative construction. The review includes (i) verb phrase structure, (ii) morpho-syntax, (iii) types of alignment and transitivity, and (iv) expression of tense, aspect, and mood.

3.1 Verb phrase structure

In Javanese, the verb phrase is left headed. The head verb can take arguments as complement. Based on the number of arguments required, Javanese verbs can have zero argument in (33), one argument (intransitive) as in (34-35), two arguments (transitive) as in (36), or three argument as in (37).

(33) Zero argument verbs

- a. *Wingi udan deres*
 yesterday rain heavily
 ‘It rained heavily yesterday’

- b. *Saiki lagi tletek*
 Now ongoing drizzle
 ‘It is drizzling now’

(34) One argument (unergative)

- a. *Dheweke n-(t)angis*
 S/he act-cry
 ‘S/he cried’

b. *Dheweke m-bengok*

S/he act-scream

‘S/he screamed’

(35) One argument (unaccusative)

a. *Dheweke tiba*

S/he fall

‘S/he fell’

b. *Dheweke klelep*

S/he drown

‘S/he was drowning’

(36) Two arguments (transitive)

a. *Pardi n-(t)andur uwit*

Pardi act-plant tree

‘Pardi planted (a) tree’

b. *Pardi tuku uwit*

Pardi buy tree

‘Pardi bought a tree’

(37) Three arguments (ditransitive)

a. *Dheweke ny-(s)umbang-ake duit marang panti asuhan*

S/he act-donate-Theme money to orphanage

‘S/he donated money to the orphanage’

b. *Dheweke m-(w)eneh-i duit marang ibu-ne.*

S/he act-give-Appl money to mother-poss

‘S/he gave money to his mother’

The verb can have auxiliaries that express tense, aspect and mood.

(38) Auxiliaries expressing tense, aspect and mood

a. *Aku arep lunga*

I will go

‘I will go’

b. *Aku sok maca koran*

I often read newspaper

‘I often read newspaper’

In (38a), future tense is expressed with auxiliary *arep* ‘will’. On the other hand, frequency is realized with auxiliary *sok* ‘often’ in (38b).

Auxiliaries and adverbs can be differentiated with respect to the verb. Adverb can be located either before or after the verb.

(39) The position of the adverb in the clause

a. *Aku wingi lunga*

I yesterday go out

‘I went out yesterday’

b. *Aku lunga wingi*

I go out yesterday

‘I went out yesterday’

In (39), the adverb *wingi* ‘yesterday’ can be merged before or after the verb *lunga* ‘go’.

On other hand, modals can only appear in front of the verb.

(40) The position of the modals in the clause

a. *Aku lagi mangan*

I in progress eat

‘I am eating’

b. **Aku mangan lagi*¹

I eat in progress

‘I am eating’

As seen in (40b), modals are less flexible in terms of position than adverb. The modal *lagi* ‘in progress’ is prohibited after the verb *mangan* ‘eat’.

Modals and adverbs can also co-occur in the same clause. If they co-occur adjacently, the adverb precedes the modal as in (41a).

(41) Modal and adverb in the same clause

a. *Aku wingi arep lunga.*

I yesterday will go

‘I would go yesterday’

b. *Aku arep lunga wingi.*

I will go yesterday

‘I would go yesterday’

In addition, adverbs should precede verb negation while auxiliaries should follow it.

¹Javanese *lagi* ‘in progress’ is not to be confused with Indonesian *lagi* ‘again/ once more’.

(42) Negation and the order of the adverb and auxiliary

a. *Aku wingi ora arep lunga*

I yesterday neg will go

‘I would not go yesterday’

b. **Aku ora wingi arep lunga*

I neg yesterday will go

‘I would not go yesterday’

3.2. Morphosyntax

Morphosyntactic processes in Javanese can be classified according to whether the process introduces a new argument controlled by the verb in a clause (valence increasing processes).

3.2.1 Valence increasing/ argument introducer processes

Valence increasing processes include transitive, causative and applicative. Transitive is marked with the suffixes *-i* and *-ake*. The suffix *-i* adds a locative argument and has an allomorph, *-ni*, which occurs if a base verb ends with a vowel as in (43a).

(43) Transitive with suffix *-i*

a. *Parjo m-layo-ni Ayu*

Parjo act-run-loc Ayu

‘Parjo ran toward Ayu’

- b. *Pardi ng-ambruk-i Parjo*
 Pardi act-fall-loc Parjo
 ‘Pardi fell on Parjo’

In (43a), the suffix *-i* adds a goal argument to the unergative verb *mlayu* ‘run’, while in (43b), the suffix adds a locative argument to the unaccusative verb *ambruk* ‘fall’.

Causative is marked with suffix *-ake*. The suffix has an allomorph *-kake* (*-ʔake*) which is attached to a base verb ends with a vowel as seen in (44a).

(44) Causative

- a. *Aku n-iba-kake gelas kuwi.*
 I act-fall-Cau glass that
 ‘I made the glass drop’
- b. *Aku ng-lingguh-ake adhi-ku.*
 Aku act-sit-Cau younger sibling-my
 ‘I made my younger sibling sit’
- c. *Aku mecah-ake pengilon neng kamar-ku.*
 I break-Cau glass in room-my
 ‘I made the glass in my room break’

Applicative constructions are marked with the suffixes *-ake* and *-i*. The suffix *-ake* has multiple functions as beneficiary, instrumental and theme affixes.

(45) Applicative constructions with *-ake*

- a. Benefactive
- Aku n-jahit-ake ibu-ku rok.*
 I act-sew-Appl mother skirt

‘I sewed mother a skirt’

b. Instrumental

Aku m-balang-ake watu neng uwit kuwi

I act-throw-Appl stone to tree that

‘I hit the tree with a stone’

c. Theme

Ibu-ku ny-(c)rita-kake dongeng marang adhi-ku

Mother-my act-tell-Appl fairy tale to younger brother-my

‘My mother told a story to my younger brother’

In contrast, the suffix *-i* only has one single function as a goal suffix.

(46) Goal applicative with suffix *-i*

Aku ng-uncal-i Ani duit

I active-throw-Appl Ani money

‘I threw the money to Ani’

Interestingly, the goal suffix *-i* can have a complementary distribution with the instrumental and theme *-ake*.

(47) Complementary distribution of suffix *-i* and suffix *-ake*

a. Complementary distribution of the goal suffix *-i* and theme *-ake*

a.1 *Aku m-aka-ni pitik sega*

I active-feed-goal chicken rice

‘I fed the chicken rice’

a.2 *Aku m-aka-kake sega neng pitik.*

I active-feed-theme rice to chicken

‘I fed the rice to the chicken’

b. Complementary distribution of the goal suffix *-i* and instrumental *-ake*

b.1 *Aku ng-ise-ni kulah banyu sumur*

I active-fill-goal tub water well

‘I filled the tub with the water from the well’.

b.2 *Aku ng-ise-kake banyu sumur neng kulah*

I active-fill-inst water well to tub

‘I poured the well water to the tub -to fill it-’

Moreover, a new argument can also be added by way of passivization with adversative passive. The adversative passive is formed with prefix *-ke*.

(48) Adversative Passive

Parman ke-tabrak pit.

Parman Adv-hit bicycle

‘Parman was accidentally hit by a bicycle’

When the root verb is unergative or unaccusative, the adversative passive can add an affected argument by means of suffix *-an*. The suffix has an allomorph *-nan* when attached to a verb ending in a vowel as seen in (49a).

(49) Adversative passive with suffix *-an*

a. Unaccusative

Dheweke ke-tiba-nan nangka

S/he Adv-fall-Goal jackfruit

‘S/he was knocked down by a jackfruit’

b. Unergative

Mangkok kuwi ke-lingguh-an dheweke

bowl that Adv-sit-Goal her/ him

‘The bowl was accidentally sat on by her/ him’

A more detailed discussion of the adversative passive is provided in chapter seven of this dissertation.

3.2.2 Non-valence-increasing processes

There are also other processes that do not introduce a new argument or add valence to a clause. One of them is nasalization which results in static or unchanging valence. The process adds a nasal prefix to a verb, which will change into an allomorph based on the place and manner of articulation of the initial sound of the verb. The initial sound can be deleted from the environment. The allomorphs are as follows.

(50) Allomorphs of prefix N-

a. m - [m]/ __ labial and labiodental phonemes

pangan ‘food’ → *m-(p)angan* → *mangan* ‘to eat’

wetu ‘exit’ → *m-(w)etu* → *metu* ‘to exit’

b. n - [n]/ __ alveolar stop

tabrak ‘hit’ → *n-(t)abrak* → *nabrak* ‘to hit’

dhalang ‘shadow puppet master’ → *n-dhalang* ‘to play shadow puppet’

c. ng- [ŋ]/ __ velar stop, liquid, vowel

kiwa ‘left’ → *ng-(k)iwa* → *ngiwa* ‘go to the left’

rembug ‘discuss’ → *ng-rembug* → *ngrembug* ‘to discuss’

ilang ‘disappear’ → *ng-ilang* → *ngilang* ‘to disappear’

d. *ny-* [ŋ]/_coronal

sapu ‘broom’ → *ny-(s)apu* → *nyapu* ‘to sweep’

colong ‘steal’ → *ny-(c)olong* → *nyolong* ‘to steal’

The nasal prefix is widely regarded as a marker for an active clause since it can be attached to either transitive or intransitive clauses. However, it can also indicate volition.

(51) Volitional action with prefix *N-*

a. *Dheweke tiba*

S/he fall

‘S/he fell’

b. *Dheweke n-tiba* → *Dheweke n-iba*

S/he volition-fall

‘S/he intentionally made himself fall’

Moreover, though the prefix *N-* can be attached to either transitive or intransitive verbs, the allomorphs of the prefixes can sometimes contrast the two types of verbs.

(52) Contrast of Allomorphs of *N-*

a. *Aku m-lompat.*

I act-jump

‘I jumped’

b. *Aku ng-lompat-i kalen*

I act-jump-goal ditch

‘I jumped over the ditch’

In (52a), the prefix *m-* is attached to an intransitive verb while in (52b), the prefix *ng-* is attached to a transitive verb.

In addition, the suffix *-i* can also indicate repeated actions or iteration apart from its applicative function.

(53) Iteration with suffix *-i*

Dheweke ny-(s)iram-i tanduran

S/he act-water-iterative plant

‘S/he watered the plants repeatedly’

I now discuss detransitivization which changes the argument relation in a verb without increasing the valence of the verb. Detransitivization is done with reduplication, a very productive in Javanese, which can produce multiple readings such as iteration, habitual process, purposeless actions, and reciprocity. The reduplication can be partial or full. In partial reduplication, the onset of the root is reduplicated and is combined with schwa to form an initial syllable as in (54). Partial reduplication results in a habitual reading.

(54) Partial reduplication: habitual reading

Dheweke seneng te-tuku neng pasar

S/he like Red-buy in market

‘He likes to buy things in the market’

Besides habitual reading, full reduplication can result in reciprocity.

(55) Reciprocity

Bocah-bocah kuwi thuthuk-thutuk-an

Children those hit-Red

‘The children hit each other’

Reduplicated verbs can also result in other readings, such as repetition or continuation of action (Miyake, 2011: 50), and incompleteness (Miyake, 2011: 51).

(56) Reduced intensity with reduplication

a. *Dheweke nyiram-nyiram tanduran.*

S/he water-Red plant

‘S/he watered the plant (unintensively)’

b. *Bocah-e turu-turu wae*

Child-Def sleep-Red only

‘The child keeps falling asleep’

(Miyake, 2011: 50)

c. *Aku sedih, tak lali-lali*

I sad 1stSing forget-Red

‘I am sad. I am trying to forget’

(Miyake, 2011: 50)

The next process is passivization. There are two types of passive in Javanese, the Volitional and the Accidental/ Adversative Passive (see 3.2.1). The volitional passive is formed with prefix *di-* attached to the verb.

(57) Volitional passive

Surat kuwi di-tulis dening Marni

Letter that pass-write by Marni

‘The letter was written by Marni’

The volitional passive has two additional prefixes that are used when the agent is the first or second person singular.

(58) Volitional passive: first and second person singular prefix

a. *Surat kuwi **tak**-tulis.*

Letter that 1st-write

‘The letter was written by me’

b. *Surat kuwi **kak**-tulis*

Letter that 2nd-write

‘The letter was written by you’

3.3 Types of alignment and transitivity

Javanese is a nominative-accusative language. However the cases are abstract and not morphologically realized. In a transitive clause, the agent receives abstract nominative case, while the theme receives abstract accusative case. In an applicative construction, the applicative argument receives an accusative case instead of the theme argument.

(59) Case assignments

a. *Ani m-(p)angan sega*

Ani active-eat rice

NOM ACC

‘Ani ate some rice’

b. *Ani n-uko-kake Tono sega*

Ani active-buy-Appl Tono rice
 NOM ACC

‘Ani bought Tono some rice’

c. *Sega di-pangan Ani*

NOM passive-eat Ani

‘The rice was eaten by Ani’

d. *Tono di-tuko-kake Ani sega*

NOM pass-buy-Appl Ani rice

‘Tono was bought by Ani some rice’

The nominative-accusative alignment is also supported by the fact that Javanese does not display split intransitivity. For instance, both unergative and unaccusative verbs can be transitivized in (60).

(60) Transitivity of unaccusative and unergative verbs

a. Unaccusative

tiba ‘to fall’ → *n-(t)iba-ni* ‘to fall on’

leleh ‘to melt’ → *ng-leleh-ake* ‘to make something melt’

pecah ‘to break’ → *m-(p)ecah-ake* ‘to make something break’

b. Unergative

m-(p)layu ‘to run’ → *m-(p)layo-ni* ‘to run after something’

m-(p)ikir ‘to think’ → *m-(p)ikir-ake* ‘to think about something’

3.4. Tense, aspect and mood

Aspect and mood are expressed with modal auxiliaries, adverbs, or affixation.

Tense is realized with an adverb or a modal.

Time	Adverb	Modal	Gloss
Present	<i>saiki</i>		now
Past: Definite Indefinite Immediate	<i>wingi</i> <i>mbiyen</i> <i>mau</i>	- - -	yesterday once just now
Future: Definite Indefinite Immediate	<i>sesuk</i> <i>mengko</i> -	<i>arep</i> - <i>meh</i>	tomorrow, in the future later almost

Table 4. Javanese tense

Aspect is realized with a modal as well as reduplication and affixation.

Aspect	Modal	Reduplication	Affixation
Perfective	<i>wis</i> ‘yet’, <i>tau</i> ‘ever’, <i>mentas</i> ‘just’	-	-
Imperfective	<i>isih</i> ‘still’	<i>lali-lali</i> ‘still forgetting’	-
Progressive	<i>lagi</i> ‘in progress’	<i>ngguyu-ngguyu</i> ‘is laughing’	suffix <i>-an</i> <i>lungguh-an</i> : is sitting
Iterative	-	<i>mongan-mangan</i> ‘eat repeatedly’	suffix <i>-i</i> : <i>n-jupuk-i</i> ‘pick repeatedly’
Ingressive-Static	-	-	infix <i>-um-</i> : <i>t-um-emplek</i> ‘is attached to’

Table 5. Javanese aspect

Mood is also expressed with adverb, reduplication and affixation.

Mood	Adverb	Reduplication	Affixation
Volition a. Intentionally	<i>sengaja</i> 'intentionally'	-	suffix N- (nasal stop) <i>n-tendang</i> (to kick) → <i>nendang</i> 'kick'
b. Accidentally	<i>ora sengaja</i> 'accidentally'	-	<i>ke-</i> <i>ke-an</i> <i>ke-tendang</i> 'is accidentally kicked' <i>ke-tiba-nan</i> 'is accidentally knocked down by something falling'
Veridicality: Unreal	-	reduplication + suffix <i>-an</i> <i>туру-туру-an</i> 'pretending to be asleep'	prefix <i>kum-</i> <i>kum-pinter</i> → <i>kuminter</i> 'pretending to be smart'
Purpose: Purposelessly	-	partial reduplication + suffix <i>-an</i> <i>pe-playu-an</i> → <i>pe-playo-n</i> 'running with no purpose'	-
Affection: Annoyance	-	<i>Mloya-mlayu!</i> - expression of annoyance because somebody was running around incessantly	-
Imperative	-	-	<i>-na, -en</i> <i>jupuk-na, jupuk-en</i> 'get (it)!'

Propositive			Cliticization <i>tak</i> for 1 st Sing <i>Aku tak lunga</i> I clitic go 'Allow me to go'
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Table 6. Javanese mood (speaker's attitude)

3.5 A-Bar Movement

Javanese displays an asymmetry of A-bar movements. Extraction of the theme argument is prohibited in an active clause. Hence, the theme cannot be topicalized with questions or clefting. In Javanese, both question and clefting are realized with relative marker *sing* 'that'.

(61) Restriction for theme A-bar movement in active clause

a. *Ani ng-guwang uwuh.*

Ani act-discard rubbish

Ani discarded some rubbish'

Question

b. **Apa sing Ani ng-guwang?*

What REL Ani act-throw

'What did Ani discard?'

Clefting

c. **Iki uwuh sing Ani ng-guwang*

This rubbish REL Ani act-discard

'This is the rubbish that Ani discarded'

In contrast, the postverbal agent cannot be extracted in a passive clause.

(62) Restriction for postverbal agent A-bar movement

a. *Uwuh kuwi di-guwang Ani*

Rubbish that pass-discard Ani

‘The rubbish was discarded by Ani’

Question

b. **Sapa sing uwuh kuwi di-guwang?*

Who REL rubbish that pass-discard

‘Who discarded that rubbish?’

Clefting

c. **Ani sing uwuh kuwi di-guwang.*

Ani REL rubbish that pass-discard

‘It was Ani who discarded that rubbish’

The A-bar movement restriction is asymmetrical since adjuncts can easily undergo the movement including an agent in a prepositional phrase.

(63) A bar movement for prepositional agent

a. *Uwuh kuwi di-guwang dening Ani*

Rubbish that pass-discard by Ani

‘The rubbish was discarded by Ani’

b. *Dening sapa uwuh kuwi di-guwang?*

By whom rubbish that pass-discard

‘By whom was that rubbish discarded?’

Other types of adjuncts can also undergo A-bar movement.

(64) Adjunct movement

a. Causal adjunct

Merga lara, bocah kuwi di-kon bali guru-ne.

Because sick, child that act-tell go back teacher-Poss

‘Because s/he was sick, the child was told to go home by his/ her teacher’

b. Instrumental adjunct

Nganggo sandal, aku di-balang kanca-ku.

With sandals I pass-hit friend-Poss

‘With sandals, I was hit by my friend’

c. Locative adjunct

Neng Jakarta, dheweke urip karo ibu-ne.

In Jakarta, s/he live with mother-Poss

‘In Jakarta, s/he lives with his/ her mother’

d. Temporal adverb adjunct

Wingi, aku ke-temu Pardi neng pasar

Yesterday I Adv-meet Pardi at market

‘Yesterday, I unexpectedly met Pardi at the market’

e. Manner adverb adjunct

Krengosan, dheweke mlayu mlebu kelas.

Panting, s/he run enter class

‘Panting, s/he ran entering the class’

f. Benefactive adjunct

Kanggo anak-ku, aku nyambutgawe esuk bengi

For child-my I work day night

‘For my child, I worked day and night’

Aldridge (2008) proposes that the extraction asymmetry correlates verbal morphology with the ability of *v* to carry an EPP feature by the verbal prefixes in Austronesian languages. In some Austronesian languages like Javanese, the *v* can be prevented from carrying an EPP feature by verbal prefixes. As a result, the argument remains in its original position and cannot raise to the VP phase edge. This renders the argument inaccessible to the probe on *C* and cannot move to the Spec, CP.

3.6 Summary

In sum, this chapter describes the syntax of Javanese related to applicative construction which include (i) verb phrase structure, (ii) morpho-syntax, (iii) types of alignment and transitivity, (iv) expression of tense, aspect and mood, and (v) A-bar movement.

Javanese verbs can have zero argument, one argument, two arguments or three arguments. The verb can have modal auxiliaries or adverbs expressing tense, aspect and mood. Modal auxiliaries always precede the verb while adverbs have a more flexible position, before or after the verb.

Moreover, the morphosyntax processes in Javanese can be divided into: (i) valence increasing processes, and (ii) non-valence-increasing processes. The valence increasing processes include transitive, causative, applicative, and adversative passive.

Transitive and applicative are marked with suffix *-i* and *-ake*, while causative is marked with suffix *-ake*. The non-valence-increasing processes include detransitivization, passivization, and nasal affixation. Detransitivization can be done with reduplication resulting in multiple readings: iteration, habitual process, purposeless action and reciprocity. In addition, passivization is marked with prefix *di-* for the third person and the clitics *tak-* and *kok-* for the first and second person singular. Furthermore, verbal affixation with nasal prefixes results in static valence.

In terms of alignment, Javanese is a nominative-accusative language with abstract cases. In addition, the language generally does not show split intransitivity in its grammar. In an applicative construction, the applied argument receives the accusative case instead of the theme argument.

Lastly, Javanese has an asymmetrical A-bar movement since there is a prohibition for the non-subject argument to be extracted to CP. Hence, a theme argument cannot be extracted in an active clause whereas a postverbal agent cannot be extracted in a passive clause. Aldridge (2008) posits that the verbal prefixes block the EPP feature at v and results in the extraction asymmetry.

CHAPTER 4

DIACHRONIC AND COMPARATIVE REVIEW

OF JAVANESE APPLICATIVE CONSTRUCTION

In this chapter, I present a brief diachronic and comparative review of Javanese applicative construction. The review is mostly done to see if the multiple functions of suffix *-ake* are also present in Old Javanese and in related languages. The result is used to support the synchronic analysis presented in this dissertation.

4.1 Diachronic review of Javanese applicative construction

Since Javanese is an Austronesian language of the Malayo-Polynesian branch, I first discuss The Proto Austronesian (PAn) and Proto Malayo-Polynesian (PMP) verbal morphologies. PAn and PMP are thought to have had a Philippine-type structure with verbs marked for actor, patient, location and circumstantial voice. Their voice markers could be combined with various other affixes including tense, mode or aspect (Adelaar, 2005: 4).

	Actor	Patient	Location	Circumstantial
INDICATIVE				
Neutral	<um> V	V-ən	V-an	Si-V
Perfective	<umin> V	<in> V	<in> V-an	Si- <in> V
Durative	<um>-R-V	R-V-ən	R-V-an	Si-R-V
NON-INDICATIVE				
Atemporal	V	V-u	V-i	án-i + V (V-àni)
Projective	<um> V-a	V-aw	V-ay	án-ay + V (V-ánay)

Table 7. PAn verbal morphology
(Ross, 2002)

	Actor	Patient	Location	Circumstantial
INDICATIVE Neutral Perfective Imperfective	<um> V <umin> V <um> R-V	V-ən <in> V R-V-ən	V-an <in> V-an R-V-an	i-V i- <in> V i-R-V
NON- INDICATIVE Atemporal Projective	V V-a	V-a (V-aw)	V-i V-ay	V-àn

Table 8. Proto Malayo-Polynesian (PMP) verbal morphology
(Ross, 2002)

The verbal morphology is still mostly present in the Philippine-type language such as those in Taiwan, the Philippines, Sabah, North Sulawesi and Madagascar. On the other hand, in Indonesian, the morphology has been reduced into actor and undergoer voice. However, the types of undergoers are distinguished with applicative suffixes (Adelaar, 2005: 7).

(65) Indonesian undergoer markers

- a. *Aku me-nulis-i amplop itu*
I act-write-Loc envelope that
'I wrote on the envelope'
- b. *Ia me-nulis-kan saya bon*
S/he act-write-Ben I receipt
'He wrote me a receipt'

(Adelaar, 2005: 7).

The suffixes *-i* and suffix *-akan* are reflexes of older proto suffixes **i* and **akən* which Pawley and Reid (1976) claim existed in Austronesian as prepositions. Their function as prepositions was to mark locations and accessory cases. These

prepositions might be captured by the verb to become a suffix or clitic, the necessary condition being that the prepositional phrase immediately follow the verb. The two forms of **i* and **aken* as prepositions and suffixes survived for a period of time not only in the Indonesian languages, but also in the Oceanic languages (Pawley and Reid, 1976: 14).

Moreover, Starosta, Pawley and Reid (1982) reconstruct **-i* as a locative suffix and *-akən* as an instrument suffix in PAn.

(66) Reconstruction of PAn non-indicative forms based on Starosta, Pawley and Reid (1982)

Actor	Undergoer	Location	Instrument
<um>	-a	-i	-akən

(Ross, 1995: 761)

It can be seen from (66), that *-akən* is reconstructed by Starosta, Pawley and Reid (1982) as instrument topic verbal marker. Meanwhile, the undergoer topic is marked with different suffix, the suffix **-a*. It can be argued that the undergoer and instrument suffixes, **-a*, **-aken* merged into one suffix, **-aken*, as reflected in modern Austronesian languages such as Chamorro, Toba Batak, Bahasa Indonesia, Bisayan languages, Inibaloi, Marinduque Tagalog, and in all three Formosan subgroups, Ayatalic (Ayatal, Seediq), Tsouic (Tsou), Paiwanic (Amis) (Starosta, Pawley, and Reid, 1982: 399). In proto Oceanic, it is reflected as **-aki* for dative (benefactive) and instrumental (Blust, 2003: 474).

The reflexes of **i-* and **-aken* are also *-i* and *-aken* in *Old Javanese*.

(67) Reflexes of **i* and **aken* in Old Javanese

- a. *anugrahan-i* ‘to bestow a gift to someone’
- b. *pa-ηgi:t-aken* ‘to sing for someone’

(Oglobin, 2005: 617)

The Old Javanese *-i* has the same function with the modern Javanese *-i* as a locative suffix.

(68) The suffix *-i* of Old Javanese

- a. *manga-liwat-i* ‘to pass by someone or something’
act-pass by-loc
- b. *h-um-udan-i* ‘to rain on’
rain-act-loc
- c. *manga-nugraha-ni* ‘to bestow a gift to someone’
act-bestow a gift-loc
- d. *t-um-angis-i* ‘to cry for someone’
act-cry-loc

(Zoetmulder and Poedjawijatna, 1961: 65)

In contrast, the Old Javanese *-aken* has more complicated functions.

(69) The suffix *-aken* in Old Javanese

- a. causative

R-in-atwa-ken ta sang Citranggada de sang Bhisma
pass-king-Cau PART det Citranggada by det Bhisma
‘Citrangga was made king by Bhisma’

(Zoetmulder and Poedjawijatna, 1961: 69)

b. transitive

*Katisayan ikang lembu a-metw-**aken** sakaharep*

magic det cow act-exit-tr all

‘The magic cow let out all [that the people wanted]’

(Zoetmulder and Poedjawijatna, 1961: 68)

c. instrumental

*Hana ta wangke ning ula k-in-alung-**aken** ing gulu bagawan Samiti*

Exist part body of snake pass-put on neck-ins at neck hermit Samiti

‘The body of the snake was put on the neck of the hermit Samiti’

(Zoetmulder and Poedjawijatna, 1961: 68)

d. theme marker: to emphasize the theme

*Wangke nira b-in-uncang-**aken** ing suket*

Body 3rd throw-pass-theme to grass

‘His/her body was thrown to the grass’

(Zoetmulder and Poedjawijatna, 1961: 71)

e. locative

*Ma-lungguh ta sira ngkana h-um-arep-**aken** ikang sekul*

active-sit part 3rd there face-act-loc det rice

‘He/She sat there facing the rice’

(Zoetmulder and Poedjawijatna, 1961: 71)

f. benefactive

Mangkana ling bhagawan Waisampaya ma-carita-ken maharaja Janamejaya

Then say hermit Waisampaya act-tell-ben king Janamejaya

‘Then said the hermit, who told the story for the king Janamejaya’

(Zoetmulder and Poedjawijatna, 1961: 74)

In relation to Javanese speech levels, OJ *-aken* is register neutral while in contrast, the MJ *-aken* is reserved for the high level (Adelaar, 2011: 339). The suffix *-i* has identical form for all levels.

I now discuss the reflexes of **i* and **aken* in Javanese dialects. Adelaar (2011) mentions that all Javanese dialects have the transitive suffix *-i* as a locative suffix to add a locative argument. The reflex of **aken* is problematic since although the dialects have suffixes equivalent to *-ake*, their forms and their functions vary across dialects. Moreover the reflexes of **-aken* in the dialects seem to be wider in scope and more complex than those of *-i*. Some of the functions are to add instrumental, comitative or benefactive arguments to the verb. They can also form a causative or yield a meaning ‘consider as [base]’. However, Adelaar (2011) mentions that the suffixes do display a similarity, in that they can make the host verbs transitive or change its valence. Adelaar (2011) concludes that the reflexes of **-aken* in the dialects are in general transitive suffixes.

4.2 Comparative review of Javanese applicative construction

There are typically two applicative suffixes in Western Austronesian languages, one (*-i* or other cognate form) for locative applicative and one covering a broader range of semantic roles usually including instruments and beneficiaries (often *akan* or other cognate form) (Himmelman, 2005: 170-171). In this sub-section, I compare Javanese applicative construction with those of Indonesian and *Tukang Besi*, two related western Austronesian languages. Indonesian is selected because it is closely related to Javanese hence showing that the Javanese applicative suffixes behave like other neighboring Austronesian languages. *Tukang Besi* is selected because it represents more conservative Austronesian languages which prove that Javanese applicatives reflect Austronesian applicative features.

4.2.1 The Applicative Suffix *-kan* in Indonesian

The first function of the suffix *-kan* is to add a benefactive argument to the clause. An applicative construction with the suffix *-kan* has a thematic paraphrase with the preposition *untuk* as seen in (70a).

(70) Benefactive Suffix *-kan* in Indonesian

- a. *John mem-beli buku itu untuk Mary*
John act-buy book that for Mary
'John bought that book for Mary'
- b. *John mem-beli-kan Mary buku itu.*
John act-buy-Appl Mary book that
'John bought Mary that book.'

c. **John mem-beli Mary buku itu*

John act-buy Mary book that

‘John bought Mary that book’

(Kaswanti Purwo, 1997)

Besides benefactive, the suffix also has instrumental and theme marker functions. The instrumental suffix has a thematic paraphrase with preposition *dengan* and the theme marker has a thematic paraphrase with suffix-less base verb as seen in (71).

(71) Instrumental and theme marker *-kan*

a. *Perawat mem-balut luka-nya dengan kain*

nurse act-wrap wound-3sg with cloth

‘The nurse wrapped his wound with a bandage’

b. *Perawat mem-balut-kan kain ke luka-nya*

nurse act-wrap-inst cloth to wound-3sg

‘The nurse wrapped the bandage around his wound’

(Sneddon, 1996: 79)

c. *John mem-beri Mary buku*

John act-give Mary book

‘John gave Mary that book’

d. *John memberi-kan buku itu kepada Mary*

John act-give-Appl.theme book that to Mary

‘John gave that book to Mary’

(Kaswanti Purwo, 1997)

4.2.2 The Applicative Suffix *-ako* in Tukang Besi

Tukang Besi is an Austronesian language spoken on the islands of Tukang Besi archipelago of Central-East Indonesia, and in numerous trading communities between Singapore and New Guinea (Donohue, 1999). It is a VOS Philippine-type language with obligatory agreement for the S/A of the clause by verbal prefix and optional agreement for O by verbal enclitic (Donohue, 2001: 219). In addition, the nouns are marked for Nominative, Non-Nominative (glossed as NN here), Genitive and Oblique. Tukang Besi is also an asymmetric language since it syntactically treats the theme and the applicative argument differently. The language has a cognate of suffix *-kan*, in the form of suffix *-ako*.

	Oblique	Applicative
Co-agent	<i>Kene</i>	<i>-ngkene</i>
Beneficiary	<i>Ako te</i>	<i>-ako</i>
Instrument	<i>Ako te, pake, kene</i>	<i>-ako</i>
(Inner) Locative, Goal	<i>di/i, kua</i>	<i>-VCi</i>
Purpose	<i>ako te</i>	<i>-ako</i>
Cause	<i>ako te</i>	<i>-ako</i>
Theme	—	<i>-ako</i>

Table 9. Tukang Besi verbal morphology
(Donohue, 1999: 220)

It can be seen from (72) that the suffix *-ako* has four functions, as beneficiary, instrument, purpose, cause and theme suffixes. However, Donohue (2001) mentions that the purpose and cause arguments do not show the behavior of a core argument.

(72) *Tukang Besi applicatives*

a. Beneficiary

No - balu te bambai ako te porai-no

3.N/A-buy NN comb PREP NN fiancée-3GEN

‘He bought a comb for his fiancée’

No-balu-ako te porai-no te bambai

3.N/A-buy-Appl NN fiancée-3GEN NN comb

‘He bought his fiancée a comb’

b. Instrument

No-tu'o te kau kene baliu

3.N-fall NN tree PREP axe

‘He chopped the tree with an axe’

No-tu'o-ako te baliu te kau

3.N -fall-Appl NN axe NN tree

‘He used the axe to chop the tree’

(Donohue, 2003: 220)

c. Theme

No-hu 'u-ako te towu

3R-give-Appl CORE sugar.cane

‘They gave some sugar cane (to someone)’

d. Purpose

No-lemba ako te kari'a

3R-carry PREP N festival

‘They carried [something] for the festival’

No-lemba-**ako** te karia'a

3R-carry-Appl CORE festival'

‘They carried [something] for the festival’

(Donohue, 1999: 221)

e. Cause

No-mate **ako** te buti

3.N/A-die Cau NN fall

‘He died in a fall’

No-mate-**ako** te buti

3.N/A-die-Appl NN fall

‘He died in a fall’

(Donohue, 2001: 221)

Based on Donohue (2001), the beneficiary and the instrumental arguments

exhibit the morphosyntactic behavior of a core: alternations with nominative case if there is object agreement of the verb, the ability to head relative clauses, and appearing in preverbal focused position while the cause and purpose arguments do not show the same behavior.

Besides serving as a preposition and an affix, *ako* can also be a verb meaning ‘do for’.

(73) No-ako-naku te mia l[um]emba te wemba
 3R-do for-1Sing.DAT.OBJ CORE person carry.SI CORE bamboo
 ‘The person carrying the bamboo did it for me’

Based on this fact, Donohue (1999: 242), proposes that ‘do for’ used to be the original meaning of suffix *-ako*. The other applicative functions were added later after a long period of grammaticalization.

4.2.3 The Applicative Suffix *-ake* in Javanese

Javanese has the suffix *-ake* whose functions are parallel with those of suffix *-kan*: benefactive, instrumental and theme.

(74) Javanese applicative suffix *-ake*

a. Benefactive Argument

Ani n-ulis-ake *Tono layang*
 Ani act-write-Appl Tono letter
 Ani wrote a letter for Tono'

b. Instrumental Argument

Ani n-uthuk-ake palu neng tembok.

Ani act-hit-Appl hammer on wall

‘Ani hit a hammer to the wall’

c. Theme Argument Marker

Dheweke m-eneh-ake gawean kuwi marang aku

S/he act-give-Appl job that to me

‘S/he gave that job to me’

To conclude, the Javanese suffix *-ake* has cognates *-kan* in Indonesian, and *-ako* in *Tukang Besi*. The cognate suffixes can add benefactive, theme and instrumental arguments. *Tukang Besi* is exceptional since its suffix *-ako* can also add purpose and cause arguments.

4.3 Summary

The proto Austronesian has a rich verbal morphology indicating voice, which includes actor, patient, location and circumstantial voice. The voice system is greatly reduced in the majority of the languages in Indonesia into actor and patient (undergoer) voice only. However, the types of undergoers are marked with applicative suffixes.

The suffixes *-i* and *-ake* are reflexes of Proto-Austronesian suffixes **i* and **aken*. In Old Javanese, the reflexes are also *-i* and *-aken*. The suffix *-ake* and its predecessor, *-aken*, always have more complicated functions than suffix *-i*. In Old Javanese, the suffix bears multiple functions as causative, intransitive, instrumental,

theme and benefactive suffixes while the suffix *-i* only has one function as a locative suffix.

Neighboring languages to Javanese have cognates of the suffix *-ake* in the forms of the suffix *-kan* in Indonesian and the suffix *-ako* in Tukang Besi. The cognates have similar functions as benefactive, theme and instrumental applicative suffixes with the exception of the suffix *-ako*, which can also serve as a purpose applicative suffix. I summarize the comparison of the functions of the applicative suffix *-ake* with its cognates in Table 10.

	Javanese <i>-ake</i>	Indonesian <i>-kan</i>	Tukang Besi <i>-ako</i>
Functions	Benefactive Instrumental Theme Marker	Benefactive Instrumental Theme Marker	Benefactive Instrumental Theme Marker Purpose
Thematic Paraphrase with Preposition	Benefactive: <i>-ake, kanggo</i> (Prep) Instrumental: <i>-ake, marang</i> (Prep) Theme Marker: <i>-ake, -i</i> (Appl Suffix)	Benefactive: <i>-kan, untuk</i> (Prep) Instrumental: <i>-kan, dengan</i> (Prep) Theme Marker: <i>-kan, -i</i> (Appl Suffix)	Benefactive: <i>-ako, ako</i> (Prep) Instrumental: <i>-ako, kene</i> (Prep) Theme marker: <i>-ako</i> Purpose: <i>-ako, ako</i> [Prep]
Symmetry of Theme-App. Arg	Asymmetric	Asymmetric	Asymmetric

Table 10. The functions of suffix *-ake* and its cognates in Indonesian and Tukang Besi

CHAPTER FIVE

APPLICATIVIZATION²

5.1 Introduction

In this chapter I discuss Javanese applicativization in detail. The Javanese applicative construction behaves like other well-behaved applicative languages with (i) verbal morpheme to form an applicative construction, and (ii) an alternation of the applicative construction and its thematic paraphrase. As discussed in chapter 1 and 3, there are two applicative suffixes, *-i* and *-ake*, in Javanese. The suffix *-i* serves as general goal or locative applicative suffix.

(75) The applicative suffix *-i* and *-ake*

a. *Aku n-awak-ake ayam goreng marang Marto*

I act-offer-Appl chicken fried to Marto

‘I offered some fried chicken to Marto’

b. *Aku n-awa-ni Marto ayam goreng*

I act-offer-Appl Marto fried chicken

‘I offered Marto some fried chicken’

In (75), *Marto* is a target of the action described by the verb *tawa* ‘to offer’ and is introduced by a goal applicative suffix in (75b).

The suffix *-ake* in contrast has three different functions, as a benefactive, an instrumental and a theme suffix.

² An earlier version of the discussion on suffix *-ake* can be found in Nurhayani, Ika. 2012. Javanese Applicative Construction. Coyote Papers: Working Papers in Linguistics. Volume 19. Tucson: University of Arizona.

(76) Benefactive suffix

- a. *Aku n-unggu omah-e Pardi kanggoAti*

I act-wait house-Poss Pardi for Ati

‘I house-sat Pardi’s house for Ati’

- b. *Aku n-unggu-ake Ati omah-e Pardi*

I act-wait-Appl Ati house-Poss Pardi

‘I house-sat Pardi’s house for Ati’

(77) Instrumental suffix

- a. *Aku n-uthuk-i tembok nganggo palu*

I act-hit-Appl wall with hammer

‘I hit the wall with a hammer’

- b. *Aku n-uthuk-ake palu nang tembok*

I act-hit-Appl hammer to wall

‘I hit the hammer to the wall’

(78) Theme marker

- a. *Aku ny-aur-i Ani utang-ku*

I act-pay back-Appl Ani debt-Poss

‘I paid back my debt to Ani’

- b. *Aku ny-aur-ake utang-ku marang Ani*

I act-pay back-Appl debt-Poss to Ani

‘I paid back my debt to Ani’

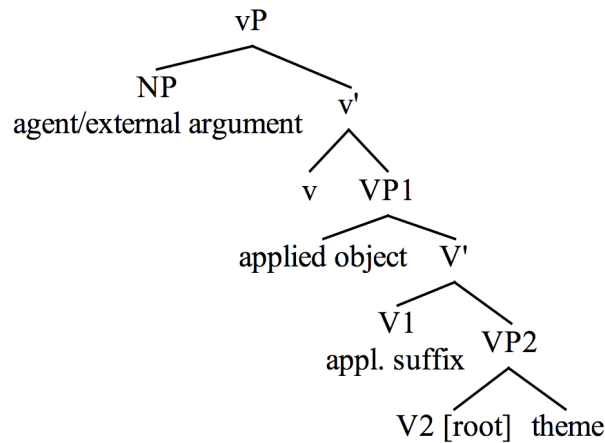
In (76b), the suffix *-ake* introduces a benefactive argument *Ati*. In contrast, in (77b) it introduces an instrumental argument *palu* ‘hammer’ while the argument *tembok* ‘wall’

cannot be applicativized and must be merged in a PP headed by preposition *nang* ‘on’. On the other hand, in (78b) it introduces a theme argument *utangku* ‘my debt’ while the goal argument *Ani* is merged in a PP. The suffix *-ake* still has one more function as a causative suffix to which I come back at the end of this introduction.

The Javanese applicative poses problems for existing analyses on applicative construction such as those of Baker (1988), Marantz (1993) and Pylkkänen (2002) as seen in chapter 1. I briefly discuss again the problems of the previous frameworks. In Baker’s (1988) preposition incorporation, the applicative suffix is a preposition adjoined to the verb via head to head movement. However, there is no specific applicative head for the applicative suffix to merge. This is problematic for Javanese because the suffix *-ake* can have three different functions as seen in (76-78). Moreover, it can be observed from (76-78) that the applicative suffixes have totally different forms from the prepositions in their thematic paraphrases.

I now discuss the framework of Marantz (1993). Marantz (1993) suggests an applicative head for the applicative suffix to merge. The applicative head is merged at a higher VP head.

(79) Marantz's (2003) applicative construction



(based on Marantz, 1993)

However, the framework still cannot accommodate the three functions of suffix *-ake* in (76-78) since they have to be lumped in one single applicative head and hence violates UTAH (see chapter 1, example 8-9). Furthermore, the framework does not offer a satisfying account of the complementary distribution between the applicative construction and its thematic paraphrase (see chapter 1 example 15).

Next, I discuss the problems of Pylkkänen's (2002) framework. Pylkkänen (2002) proposes that applicatives can be classified into a high or a low applicative based on their semantics. Furthermore, she argues that the high applicative relates the applied argument to the event described by the verb and therefore does not take a direct object into account. As a result, the high applicative is compatible with unergative verbs and implicit object construction. On the other hand, the low applicative involves a transfer of possession and therefore requires a direct object to be present.

However, Javanese applicatives show both traits of a high and a low applicative (see chapter 1, example 11-14). It can be argued that the suffix *-i* and suffix *-ake* are actually four different sets of applicative suffixes, the high applicative suffixes *-i* and *-ake* and the low applicative suffixes *-i* and *-ake*. However, that is not the case as seen in (80).

(80) Low applicative with implicit object construction in Javanese

- a. *Aku lagi mangsak.*
I prog cook
‘I am cooking’
- b. *Aku lagi mangsak-ake ibu*
I prog cook-Appl mother
‘I am cooking for mother’
- c. *Aku lagi mangsak-ake ibu jangan*
I prog cook-Appl mother soup
‘I am cooking some soup for mother’

In (80b), the clause *aku lagi mangsakake ibu* ‘I am cooking for mother’ has an implicit theme argument. However, it can be seen that the clause can have a transfer of possession reading in that the theme argument *jangan* ‘soup’ is intended to be of the possession of the applied argument *ibu* ‘mother’ in (80c). It can also be observed that the two suffixes *-ake* in (80b) and (80c) are identical and Pylkkänen’s (2002) framework unnecessary divides them into two different categories as a high and a low applicative.

It can be concluded that previous frameworks have the following problems with Javanese applicatives:

- (i) They cannot account for the multiple functions of suffix *-ake* with only one or two applicative heads (Marantz, 1993 and Pylkkänen, 2002)
- (ii) They do not attempt to account for a virtually identical representation for the applicative construction and its thematic paraphrase (Baker, 1988, Marantz, 1993 and Pylkkänen, 2002)
- (iii) It classifies identical suffixes into unnecessary distinction of high-low applicative (Pylkkänen, 2002).

In this chapter, I propose a new approach to solve the above three problems. I close my discussion with the causative *-ake*.

(81) Causative *-ake*

a. *Murid-murid ng-arah ngulon.*

Students act-head west

‘The students headed to the west’

b. *Pak Guru ng-arah-ake murid-murid ngulon*

Teacher act-head-Cau students west

‘The teacher caused the students to head to the west’

It can be seen in (81) that the addition of suffix *-ake* transitivizes the verb *arah* ‘head to’ and introduces a new causative agent. The agent *Pak Guru* ‘the teacher’ causes the students to do an action, *ngulon* ‘to head to the west’.

In previous frameworks, causative and applicative are discussed as two

separate subjects. Javanese shows that due to their identical forms, causative is linked to applicative. However, it will not be preferable to try to derive causative *-ake* with an applicative head like the three other uses of *-ake*. Therefore, I propose in this chapter a new approach which can account for both applicative suffixes and causative.

5.2 Previous frameworks

I start by discussing the most important frameworks of applicative construction. The frameworks include Baker (1988), Marantz (1993) and Pylkkänen (2002).

5.2.1 Baker's (1988) framework

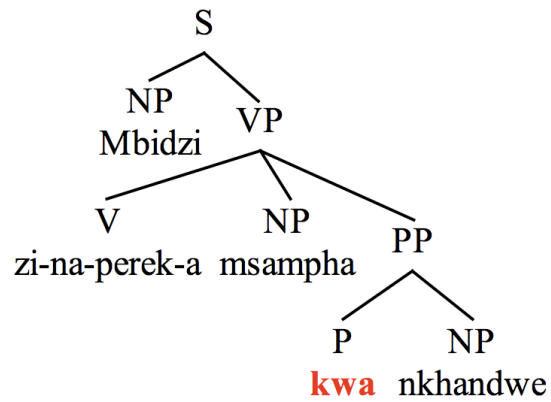
I discuss first the framework of Baker (1988) who treats the applicative by means of incorporation. Incorporation is the adjunction of an X^0 category to an X^0 governor such as verb. The applicative morpheme is generated as an independent lexical item in underlying syntactic structure and then moves from its base position to combine with the verb via head to head movement (Baker, 1988: 19) A verbal applicative morpheme results when a preposition moves from PP and adjoins to the verb. Hence a preposition incorporated to a verb results in applicative construction in (82) while a preposition in situ results in a thematic paraphrase in (83).

(82) Thematic paraphrase in Baker's (1988) framework of Chichewa

Mbidzi zi-na-perek-a msampha kwa nkhandwe

zebras SP-PAST-hand-ASP trap to fox

'The zebras handed the trap to the fox'



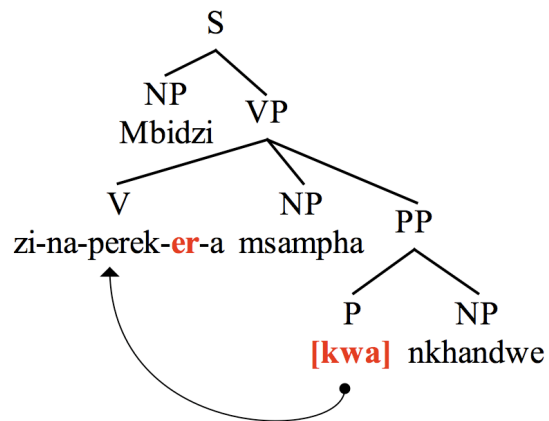
(based on Baker, 1988)

(83) Applicative construction (preposition incorporation) in Chichewa

Mbidzi zi-na-perek-er-a nkhandwe msampha

zebras SP-PAST-hand-APPL-ASP fox trap

‘The zebras handed the fox the trap’



(based on Baker, 1988)

One problem with Baker's (1988) theory is that in most languages including Javanese, the applicative morpheme is morphologically unrelated to the preposition that occurs in its thematic paraphrase. If applicative morphemes are really an instance of preposition incorporated to the verb, the normal situation would be for the preposition and the affix to be homophonous or at least closely related. Second, it is an apparently accidental fact that the applicative morpheme is always adjoined to a verb rather than to any other X^0 category such as N and A. Third, the preposition must adjoin to the right of the verb, contrary to Kayne (1999)'s claim that a head movement is always on the left.

5.2.2 Marantz's (1993) framework

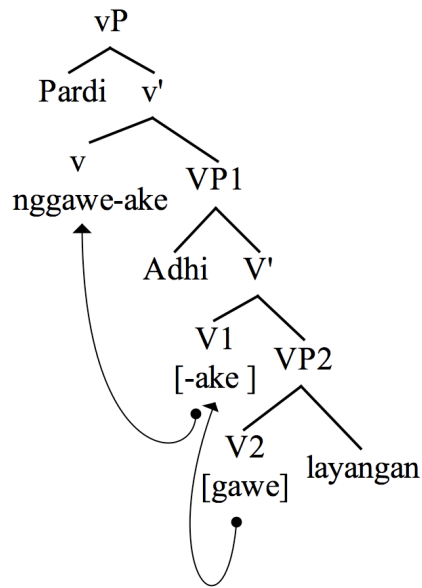
Next, I discuss the framework of Marantz (1993). Marantz (1993) proposes a structure of 'complex predicates' with two VPs to account for the applicative construction. The higher VP head hosts the applicative head to which the applied affix can merge. The APPL affix behaves as a verb that takes an event argument semantically in the form of a VP complement. The lower VP includes a root verb and a second or lower object (the theme or patient), which appears in a direct object position of this VP (Marantz, 1993: 114). The combination of the APPL affix with a lower VP results in the merging of a higher object (the applicative object) as a semantic argument of the applicative construction. In addition, the APPL affix may or may not have an overt phonological realization. If the affix has an overt form, a V-rising or adjunction or merger will put the applied affix and the verb together in the course of the derivation.

(84) Marantz's (1993) applicative construction

Pardi ng-gawe-ake Adhi layangan

Pardi act-make-Appl Adhi kite

'Pardi made Adi a kite'



In (84), the applied suffix *-ake* is merged at the head of the higher VP and as a consequence, an applied argument *Adhi* is merged at the Spec of the V. The verb *gawe* 'make' picks the suffix by a movement from the head of the lower VP to the applied head at the higher VP.

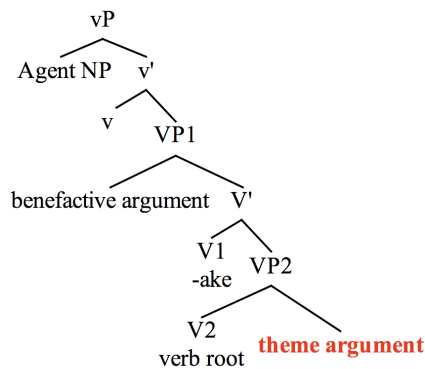
Marantz's (1993) theory is an improvement over Baker's (1988) theory because the applicative suffix is a verbal suffix and not a preposition. The V head is also correctly merged to the left of the applied affix in the APPL, in line with a regular head movement.

However, it can be observed that this theory with one applicative head only

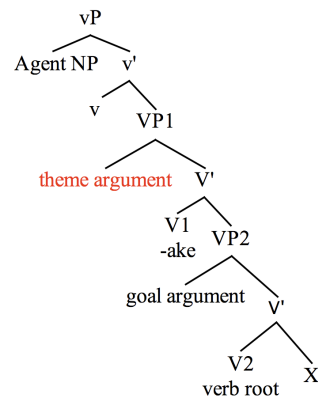
works well with the Javanese suffix *-i*, which only has one function as a locative applicative suffix. It is difficult though to account for the multiple functions of *-ake* especially the theme *-ake*.

(85) The Derivation of *-ake* with Single Applicative Head

a. the benefactive *-ake*



b. the theme *-ake*



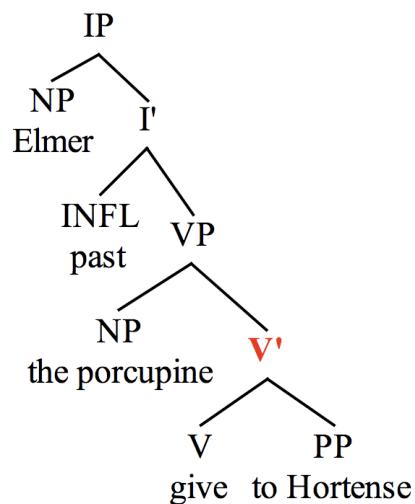
Applying Marantz's (1993) derivation to Javanese benefactive and theme *-ake* in (85), we have two subsets of arguments and applicative morphemes according to the type of the merged applicative. In the first subset, when the Benefactive *-ake* is merged at the Applicative Head, the benefactive argument is merged at the Spec of the higher VP and the Theme *-ake* at the Spec of the lower VP. In contrast, in theme applicative, the theme argument will be merged at the Spec of Higher VP while the goal argument occupies the Spec of the lower VP. This is against the Uniformity of θ -Assignment Hypothesis (UTAH) (Baker 1988) which states that identical thematic relationship between predicates and their arguments are represented syntactically by identical structural relationships. The UTAH would rule out the fact that the Theme can be

merged in two different positions, at the Spec of Higher VP for the theme applicative and as the complement of the lower VP for the benefactive applicative.

Second, Marantz's (1993) theory proposes different structures for the applicative constructions and its thematic paraphrase. The applicative object is merged in another VP of its own while the same argument when contained in a PP is merged as a complement of the verb and does not project an additional VP, as shown in (86).

(86) Marantz's (1993) thematic paraphrase

Elmer gave the porcupine to Hortense.



The applicative object and the PP in the thematic paraphrase seem to bear the same argument relations to the verb, and yet they are generated in different structures, one with a single VP and the others with two VPs.

a.	<u>Elmer</u> Agent	<i>gave</i>	<u>Hortense</u> Benefactive	<u>the porcupine.</u> Theme
b.	<u>Elmer</u> Agent	<i>gave</i>	<u>the porcupine</u> Theme	<i>to</i> <u>Hortense.</u> Benefactive

It can be observed that (87a) and (87b) are truth-functionally equivalent in terms of argument relations. In both examples, *Elmer*, *Hortense*, and *the porcupine* hold the same argument relations. *Elmer* is an agent argument, *Hortense* is a benefactive argument and *the porcupine* is a theme argument. If the applicative construction and its applicative are underlyingly equivalent, why should they be generated in different structures?

(88) The complementary distribution of suffix *-i* and *-ake*

- 86

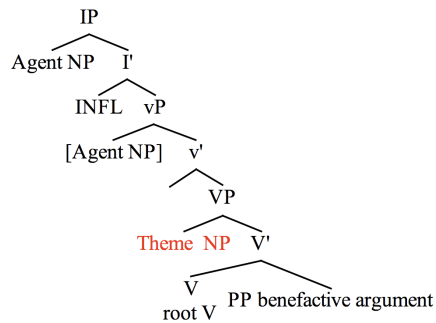
- b. *Aku m-eneh-ake tempe goreng marang Surti*
 I act-give-Appl tempeh fried to Surti
 ‘I gave fried tempeh to Surti’

It is clear that (88b) is the thematic paraphrase of the goal applicative in (88a). However, it can also be seen that (88b) is a theme marker applicative construction. Moreover, it can also be assumed that the goal applicative in (88a) is the thematic paraphrase of (88b) reciprocally.

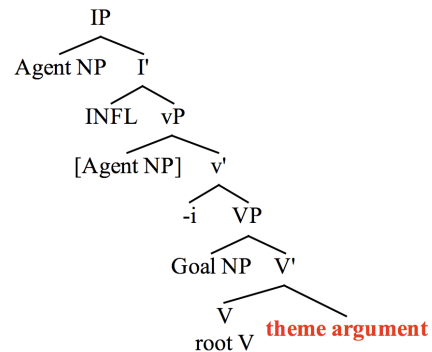
Applying Marantz’s (1993) derivation to Javanese thematic paraphrase results in another violation of UTAH.

(89) The Derivation of *-ake* with Marantz’ (1993) Thematic Paraphrase

a. the benefactive *-ake*



b. the theme *-ake*



As can be seen in (89), the theme argument can be merged at two different positions which is a violation of UTAH. In the benefactive paraphrase, the theme is merged at the Spec of VP while in the theme applicative paraphrase, it is merged as a sister of V inside a VP.

It can be argued that the theme *-ake* is not a real applicative suffix. However, it should be noticed that the theme *-ake* is obligatory in the theme applicative context.

(90) Theme Argument Marker: Obligatory

- a. *Dheweke m-eneh-i aku gawean kuwi.*
 S/he act-give-Appl me job that
 ‘He gave me that job’
- b. *Dheweke m-eneh-ake gawean kuwi marang aku*
 S/he act-give-Appl job that to me
 ‘He gave that job to me’
- c. **Dheweke m-eneh gawean kuwi marang aku*
 S/he act-give job that to me
 ‘S/he gave that job to me’

In example (90a), the applicative goal suffix *-i* attached to the verb *weneh* ‘give’ licenses the *Affectee* argument *aku* ‘me’. On the contrary, in (90b), the *Affectee* argument is in a PP while the theme argument becomes the core object marked by *-ake*. The presence of suffix *-ake* in (90b) is obligatory as shown by the fact that example (90c) without *-ake* is ungrammatical.

Further evidence proves that as a core argument, the theme argument can be passivized in (91a) which is not the case for the *Affectee* argument, which has lost its trait as the core object in (91b).

(91) Theme as a passive subject in theme applicative

- a. *Gawean kuwi di-weneh-ake dheweke marang aku*
 Job that pass-give-Appl him to me

‘The job was given to me by him’

b. **Aku di-weneh-ake dheweke gawean kuwi*

I pass-give-Appl her/him job that

‘I was given that job by him’

Cross-linguistically, theme arguments tend to be morphologically unmarked and the theme-*ake* is a marked construction with limited distribution in Javanese. Nevertheless, it is quite common for certain verbs to exhibit the pattern.

(92) Verbs with theme-*ake*

utang ‘to have a debt’, *tawa* ‘to sell’, *undhak* ‘to raise’, *pakan* ‘to feed’, *ombe* ‘to drink’, *uncal* ‘to throw’, *ambu* ‘to smell’, *crita* ‘to tell a story’, *dolan* ‘to play’, *ijol* ‘to reimburse’.

I argue in this dissertation that the three different uses of *-ake* arise from the fact that *-ake* is classified in the lexicon as belonging to three distinct argument categories rather than trying to derive all three constructions from a single applicative head.

5.2.3 Pylkkänen’s (2002) framework

In her widely known high and low applicative framework, Pylkkänen (2002) claims that a low applicative relates a recipient or a source to an individual which is the internal argument of a verb and that high applicatives relate an individual to an event. The proposal has consequences for transitivity and verb semantics as follows:

(i) Transitivity restrictions

Only high applicative heads should be able to combine with unergatives. Since a low applicative head denotes a relation between the direct and indirect object, it cannot appear in a structure that lacks a direct object (as in structures with unergative verbs and implicit direct objects).

(ii) Verb semantics

Since low applicatives imply a transfer of possession, they are not compatible with static verbs such as *to hold*. Hence an event of *holding a bag* would not result in the bag ending up in somebody's possession. On the other hand, high applicative has no such restriction because it is plausible that somebody would benefit from a bag-holding event. Moreover, in contrast with the high applicative, the low applicative is incompatible with structures that lack a direct object, such as unergative verbs and implicit objects as seen in (93-94).

(93) Low applicative with unergative verbs: ungrammatical

- a. I ran.
- b. *I ran him (intended reading: I ran for him).

(94) Low applicative with implicit object construction in English: ungrammatical

- a. Last night, I baked.
- b. *Last night, I baked him (intended reading: I baked for him).
- c. Last night, I baked him something

Based on verb semantics, the low applicative is restricted for static verb or context that does not involve a transfer of possession reading.

(95) Low applicative and no transfer of possession context: ungrammatical

- a. *He ate the wife food (intended reading: He ate food for his wife).
- b. *John held Mary the bag (intended reading: John held for Mary the bag).

However, Javanese applicative does not conform to the above restrictions. The applicative suffixes *-i* and *-ake* are compatible with unergatives and implicit object construction.

(96) Suffix *-i* + unergative: grammatical

- a. *Ati m-layu*
 Ati act-run
 ‘Ati ran’
- b. *Ani m-layu-ni Pardi*
 Ani act-run-Appl Pardi
 ‘Ani ran toward Pardi’

(97) Suffix *-ake* + unergative: grammatical

- a. *Ani n-donga*
 Ani act-pray
 ‘Ani prayed’
- b. *Ani n-donga-ake Pardi*
 Ani act-pray-Appl Pardi
 ‘Ani pray for Pardi’

(98) Suffix *-i* + implicit object: grammatical

- a. *Ani ng-irim-i Pardi buku sejarah*
 Ani act-send-Appl Pardi book history

‘Ani sent Pardi a history book’

- b. *Ani ng-irim-i Pardi wingi*

Ani act-send-Appl Pardi yesterday

‘Ani sent Pardi (something) yesterday’

(99) Suffix *-ake* + implicit object: grammatical

- a. *Ani ng-godhog-ake Pardi tela pendem*

Ani act-boil-Appl Pardi sweet potato

‘Ani boiled for Pardi some yam’

- b. *Ani ng-godhog-ake Pardi neng pawon.*

Ani act-boil-Appl Pardi in kitchen

‘Ani boiled (some sweet potatoes) for Pardi’

Based on the evidence in (96-99), the suffixes *-i* and *-ake* seem to be high applicatives because they are compatible with unergative and implicit direct object construction. However, this is not the case, because the suffixes can also accommodate a transfer of possession reading.

(100) Suffix *-i*: transfer of possession

Marni ng-irim-i Ati tela pendem

Marni act-send-Appl Ati sweet potato

‘Marni sent Ati some sweet potatoes (for the possession of Ati)’

(101) Suffix *-ake*: transfer of possession

Marni m-angsak-ake Ati tela godhog

Marni act-cook-Appl Ati cassava boiled

‘Marni cooked for Ati boiled cassava (for the possession of Ati)’

It might be assumed that Javanese has four types of applicatives: the low applicative *-ake*, the high applicative *-ake*, the low applicative *-i* and the high applicative *-i*. However, I argue that this is not the case.

(102) Suffix *-i* with traits of high and low applicatives

- a. High applicative: the ability to combine with implicit objects

Aku ng-irim-i Surti wingi bengi.

I act-send-Appl Surti yesterday night

‘I sent Surti (something) last night’

- b. Low applicative: transfer of possession

Aku ng-irim-i Surti jangan gori wingi bengi

I act-send-Appl Surti soup jackfruit yesterday night

‘I sent Surti some jackfruit soup last night’

(103) Suffix *-ake* with traits of high and low applicatives

- a. Applicative: the ability to combine with implicit object

Aku mangsak-ake ibu wingi bengi

I act-cook-Appl mother last night

‘I cooked for mother last night’

- b. Low Applicative: Transfer of Possession

Aku mangsak-ake ibu jangan gori wingi bengi

I act-cook-Appl mother soup jackfruit last night

‘I cooked jackfruit soup for mother last night’

It can be observed that example (102a) is identical to (102b). The only difference is

that in (102a) the theme argument is explicitly identified while in (102b) the theme argument is implicitly understood. It is clear that the suffix *-i* in (102a) and (102b) are the same suffixes and not two distinct suffixes representing a high and a low applicative. This is also the case with (103a) and (103b). Similarly, the suffix *-ake* in (103a) is identical to the suffix *-ake* in (103b).

There are also problems with the semantics of Pylkkänen's (2002) framework. Larson (2010) observes that problem lies in Pylkkänen's (2002) attempt to uncouple the indirect object argument from the event structure to account for the possession relation between the applicative and the theme argument in (104).

(104) Pylkkänen's (2002) Low Applicative

- a. John wrote Mary that letter.
- b. $\exists e$ [writing (*e*) & Agent (*e*, John) & Theme (*e*, that_letter) & to-the-possession-of (that_letter, Mary)]

(Pylkkänen, 2002: 14)

In (104), the referent *Mary* is not directly related to the event quantifications through binary thematic relation such as Goal but is related to the referent of the theme argument by means *to-the-possession-of* (*x,y*).

However, Larson (2010) points out that the separation between the indirect object from the event structure of the verb results in the weak conjunctive connection between the writing and the possession.

(105) Larson's Observation on Low Applicative

- a. John wrote that letter and Bill gave Mary that letter

$\exists e$ [writing (e) & Agent (e, John) & Theme (e, that_letter)] & $\exists e$ [giving] (e) & Agent (e, Bill) & Theme (e, that_letter) & Goal (e, Mary)]

- b. John wrote Mary that letter

$\exists e$ [writing (e) & Agent (e, John) & Theme (e, that_letter) & Goal (e, Mary)]

As a consequence, the conjunction in (105a) does not entail (105b) since Mary is related (as Goal) to the giving event and not to the writing event. In other words, John's writing a letter, and that letter's coming into Mary's possession, does not entail that John wrote the letter to Mary. Larson (2010) concludes that the evidence shows that Pykkänen's (2002) semantics analysis of low applicatives is inadequate.

It can be concluded that there are two major problems in Pykkänen's (2002) theory: (i) it assigns different structures to sentences with *-i* and *-ake* that have identical thematic rules and (ii) it cannot account for the full range of thematic roles associated with the suffixes *-i* and *-ake*, whether it is a benefactive, a goal, an instrumental or a theme argument.

5.3 A New Approach

We have concluded that the available frameworks have the following problems: (i) no account for the multiple functions of suffix *-ake* with single applicative head, (ii) no account for the alternation between applicative construction and its thematic paraphrase, and (iii) unnecessarily divides suffixes with identical thematic relationship into a high and a low applicative.

Therefore an account on Javanese applicative constructions should include:

- (i) multiple argument heads to host the multiple uses of *-ake*.
- (ii) an identical representation of the applicative construction and its thematic paraphrase,
- (iii) a classification of applicatives based on the semantic roles of the applied arguments

To solve this problem, we need to rethink the notion of applicative construction. Applicative morpheme should not be associated only to one single applicative head. On the contrary, the applicative morpheme can be generated at different argument heads. For this, we need multiple argument heads which represent the semantic roles of each of the applied arguments. In Bowers' (2010), the multiple argument head is made possible with the introduction of each argument at a specific argument head, merged from bottom to top in accordance with a fixed Universal Order of Merge (UOM): (Ag(ent))³ < Instr(ument) < Ben(eficiary) < Goal < Source < Th(eme) < Aff(ectee)).

The primary arguments are Affectee and Theme merged at Spec, Aff and Spec, Theme between TrP and ThP while the secondary arguments are Inst, Ben, Source, and Goal, and they are merged in their respective head between Th-P and Ag-P. Each applicative morpheme can be attached to a specific argument head according to its lexical categories.

³ Another feature of Bowers' theory, which will not be of concern here but will be relevant to the discussion of passive in chapter 6, is that the agent of a transitive verb is merged very low in the specifier of an Agent head. If Ag selects DP, it is raised to Spec, Pr to satisfy the pure EPP feature of Pr, where it can be valued NOM by T and then raised to [Spec, T]. If Ag selects a PP, then a passive sentence results (Bowers, 2010: 32-39).

Next, it is necessary to turn to the basic definition of applicative construction. Bowers (2010) defines applicative construction as a construction in which an argument head: (i) selects a DP with an unvalued case feature, (ii) is realized by a non-null verbal morpheme (Bowers, 2010). With this definition, it is possible to generate applicative morphemes at different argument heads while at the same time accounting for the existence of a thematic paraphrase with a PP. If the argument head c-selects DP with unvalued case feature, the Tr head assigns accusative Case (ACC) to it and the EPP feature in Tr prompts the applicative object to move to [Spec, Tr]. If a PP is chosen, the Theme will receive ACC case and the applicative object contained in the PP will receive inherent case from the preposition.

Before we begin analyzing Javanese, let us first illustrate Bowers's (2010) framework with his derivation of the double object construction in English.

(106) English applicative construction

Ani wrote Tono a letter

root then moves consecutively to the Tr head, Pr head and Voi head before ends up in T head.

On the other hand, because arguments are merged in Spec positions, each argument category must also have a c-selection feature. If the category Aff c-selects the DP *Tono*, the Aff-DP is case marked by the probe in Tr head. The probe in Tr assigns ACC case to Aff-DP *Tono* and moves it to Spec, Tr. On the other hand, the agent DP is raised by the pure EPP features at the Pr and Voi heads to Spec, Pr and Spec, Voi. At the Spec, Voi, the probe in T assigns nominative case to Ag-DP and moves it to Spec, T.

It can be noted that the Voice Phrase is in a higher position below T. This is done in anticipation of the discussion on Javanese passive in chapter 6 which requires a higher VoiP. The support for the higher VoiP is based on Merchants' (2013) framework on the voice mismatch in English ellipsis. This is also discussed in detail in chapter 6.

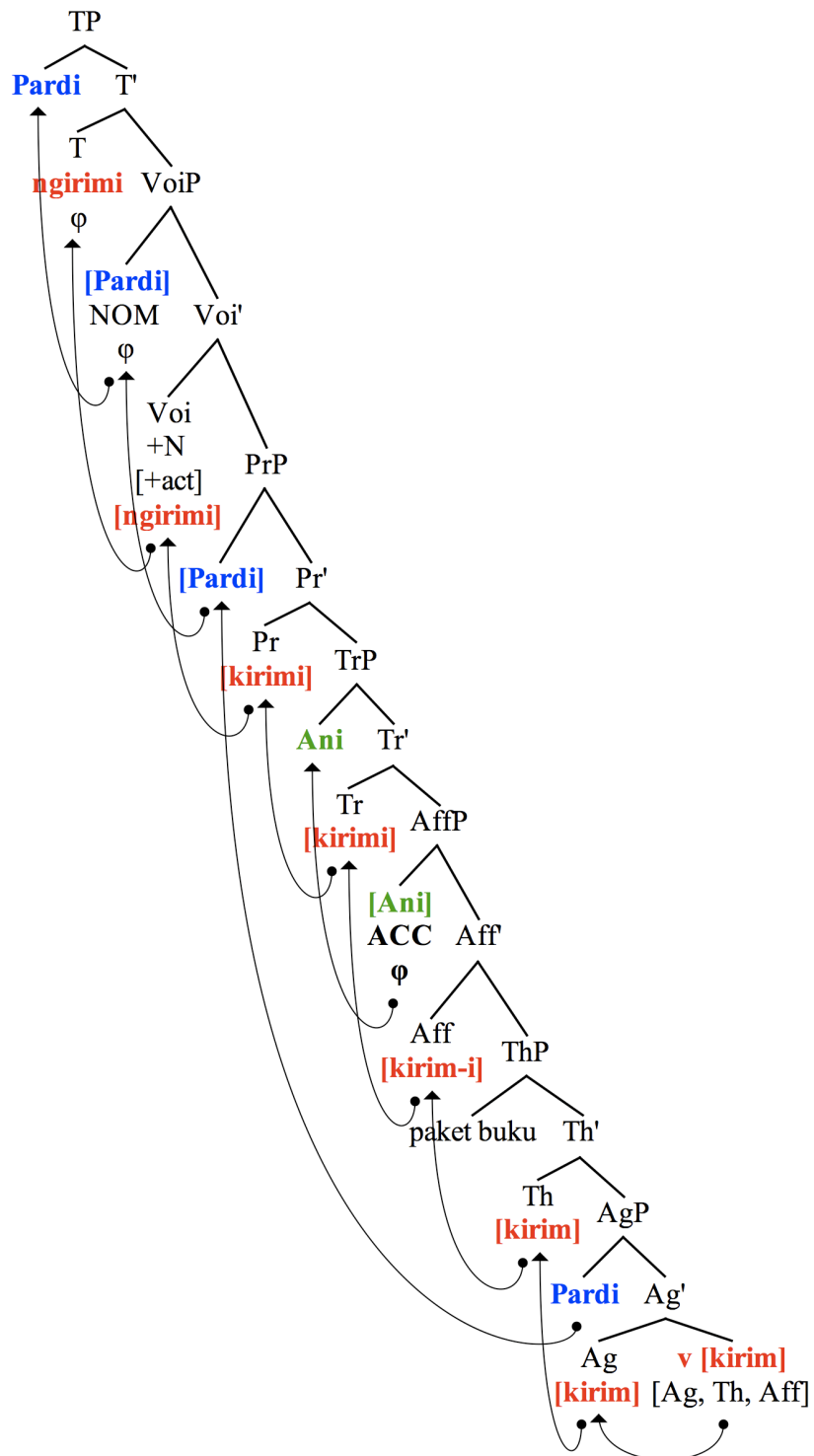
Because these structures are universal, the structure of Javanese applicative is identical to that of English. However, the English applicative head is phonologically null, while in Javanese it is always realized with an applicative morpheme. I start first with the representation of the suffix *-i*. The suffix *-i* can be merged at the Affectee head as seen in (107) because the animate goal argument is interpreted here as an Affectee.

(107) The representation of applicative suffix *-i*

Pardi ng-irim-i Ani paket buku

Pardi act-send-Appl Ani package book

‘Pardi sent Ani a package of book’



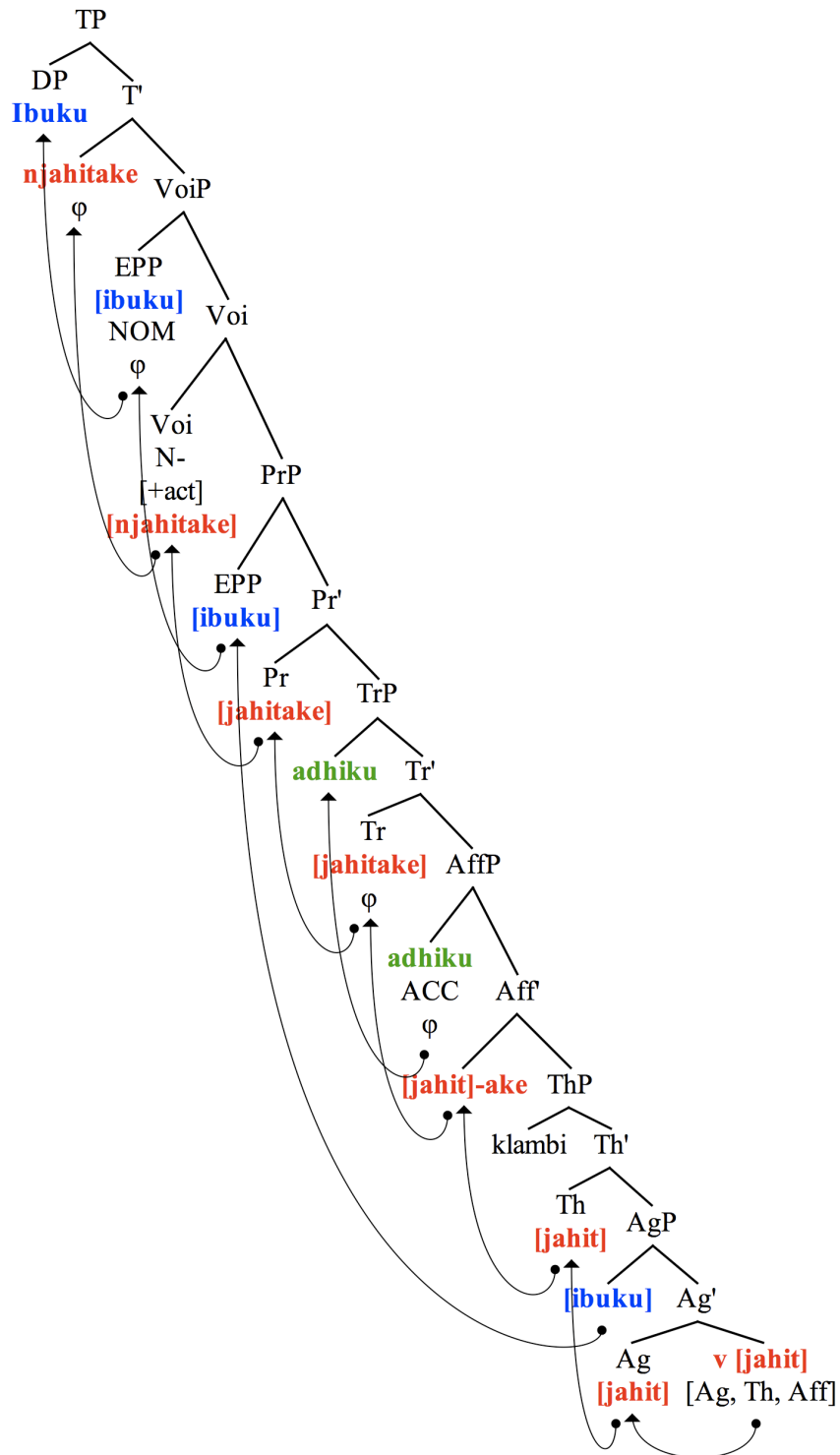
The derivation in (107) goes as follows: the root verb *kirim* ‘send’ has an argument selection features of Ag, Th and Aff, which can be satisfied by adjoining it to a light head with matching categorial features. Thus, the root first adjoins to the Ag, and then to Th, and the last to the Aff-head, where it is adjoined to the goal morpheme *-i* at the Affectee head.

On the other hand, the Aff-head c-selects a DP with unvalued case, *Ani*. Tr assigns ACC case to the Aff-DP *Ani* and moves it to the Spec, Tr. Similarly, the Ag-DP *Pardi* is merged at [Spec, Ag], and the Th-DP *paket buku* ‘package of book’ is at [Spec, Th]. Ag-DP *Pardi* is then raised by the pure EPP feature at Spec, Pr and is assigned a nominative case by T and then raised to Spec, T.

The suffix *-ake* also has similar representation. The benefactive *-ake* can be merged at the Aff-head as seen in (108). The suffix *-ake* is derived in a similar fashion with suffix *-i* in the Affectee Head.

(108) The merger of the benefactive *-ake* at the affectee head

<i>Ibu-ku</i>	<i>n-jahit-ake</i>	<i>adhi-ku</i>	<i>klambi</i>
Mother-my	active-sew-Appl	younger sibling-my	outfit
‘My mother sewed my younger sibling an outfit’			



In (108) the root verb *jahit* ‘sew’ has a-selection features, Ag, Th and Aff, which can

be satisfied by adjoining it to each of the heads. Therefore the root first adjoins to the Ag, and then to Th, and the last to the Aff-head to adjoin the benefactive morpheme *-ake* at the Affectee head.

The Aff-head c-selects a DP with unvalued case, *adhiku* ‘my younger sibling’. Tr assigns ACC case to the Aff-DP *adhiku* ‘my younger sibling’ and then moves it to the Spec, Tr. On the other hand, the Ag-DP *ibuku* ‘my mother’ is merged at Spec, Ag, and the Th-DP *klambi* ‘outfit’ is at Spec, Th. Ag-DP *ibuku* ‘my mother’ is then raised by the pure EPP feature at Spec, Pr and is assigned a nominative case by T and then raised to Spec, T.

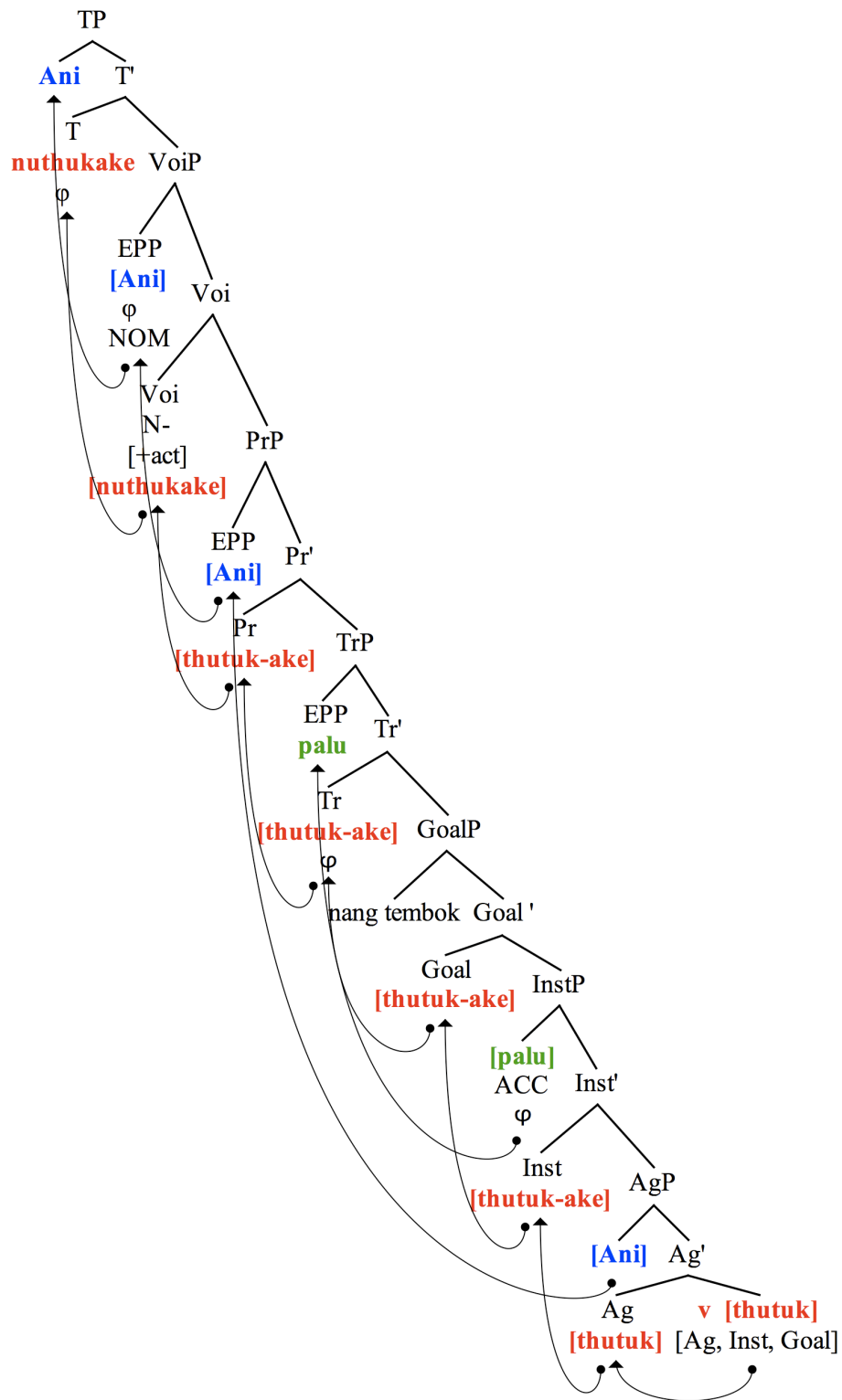
Now I discuss the Instrumental *-ake*. The Instrumental *-ake* can be contained in the Inst head between the ThP and the AgP repeated below in (109).

(109) The merger of the instrumental *-ake*

Ani n-uthuk-ake palu neng tembok.

Ani active-hit-Appl hammer on wall

‘Ani hit a hammer to the wall’



In (109), the root *nuthuk* ‘hit’ merged as a sister of the Ag head has a-selection Ag, Inst and Goal that must be satisfied by adjoining the root to the Ag head, Inst head and Goal head. At the Inst head, the root merges with suffix *-ake*.

When the Instrumental Head is occupied by *-ake*, it must select a DP such as *palu* ‘hammer’ which has an unvalued case feature. The arguments, including the instrumental argument, are merged through the c-selection feature of the argument categories. The c-selection of Ag category is satisfied by mergering the Ag-DP *Ani* in the [Spec, Ag], where the c-selection of the Inst category is satisfied with the merger of *palu* ‘hammer’ at [Spec, Instr]. Note however, that the Goal-DP c-selects a PP *nang tembok* ‘to the wall’. The Tr head then assigns ACC case to the Instrumental argument *palu* ‘hammer’ and the EPP feature in Tr raises the instrumental argument to [Spec, Tr].

The last use of *-ake* is as a theme marker repeated here in (110).

(110) The theme marker *-ake*

<i>Dheweke</i>	<i>m-eneh-ake</i>	<i>gawean kuwi</i>	<i>marang</i>	<i>aku</i>
S/he	active-give-Appl	job	that	to me
‘S/he gave that job to me’				



In (110), the theme-*ake* is merged at Theme Head. On the other hand, the Aff-DP c-selects a PP *marang aku* ‘to me’.

The thematic paraphrases are derived from virtually identical structures because argument heads may often select either a DP with unvalued case feature or a PP.

(111) The thematic paraphrase of suffix *-i*

Pardi ng-irim-i paket buku marang Ani

Pardi act-send-Appl package book to Ani

‘Pardi sent a package of book to Ani’



In (111), the goal affectee *Ani* must be contained in a PP headed by *marang* ‘to’ and receives inherent case from the preposition because the Aff head is empty. The Th-DP *paket buku* ‘a package of book’ is assigned ACC by the probe in Tr and raised to [Spec, Tr] accounting for the correct order of the Theme and the Affectee argument.

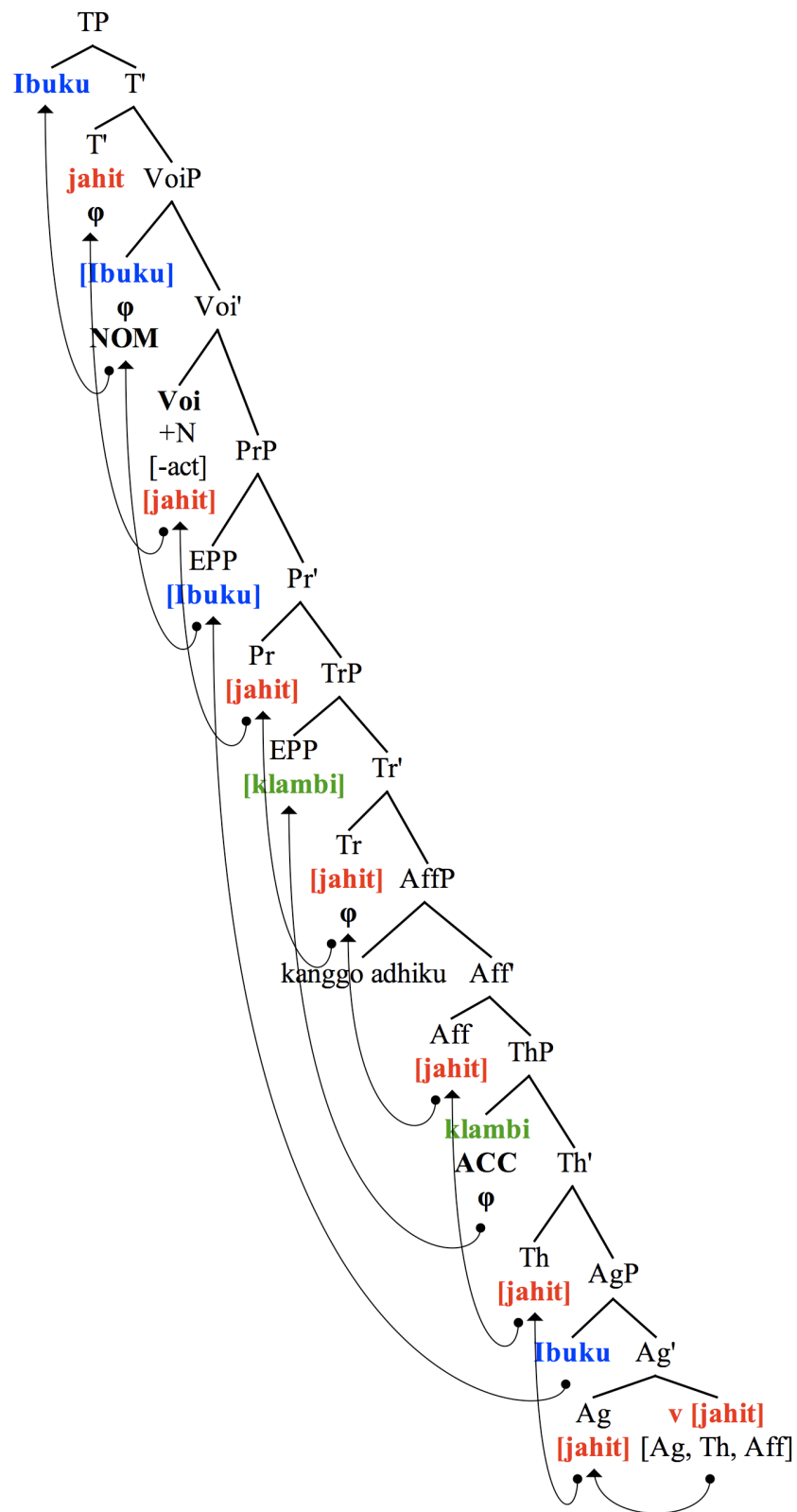
Now I turn to the thematic paraphrase of suffix *-ake* which has similar derivation with suffix *-i*. In (112), the benefactive argument *adhiku* ‘my younger sibling’ is contained in a PP headed by *kanggo* ‘for’ and receives inherent case from the preposition. As a result, the Th-DP *klambi* ‘outfit’ is assigned ACC by the probe in Tr and raised to [Spec, Tr].

(112) The thematic paraphrase of the benefactive argument

Ibu-ku n-jahit klambi kanggo adhi-ku

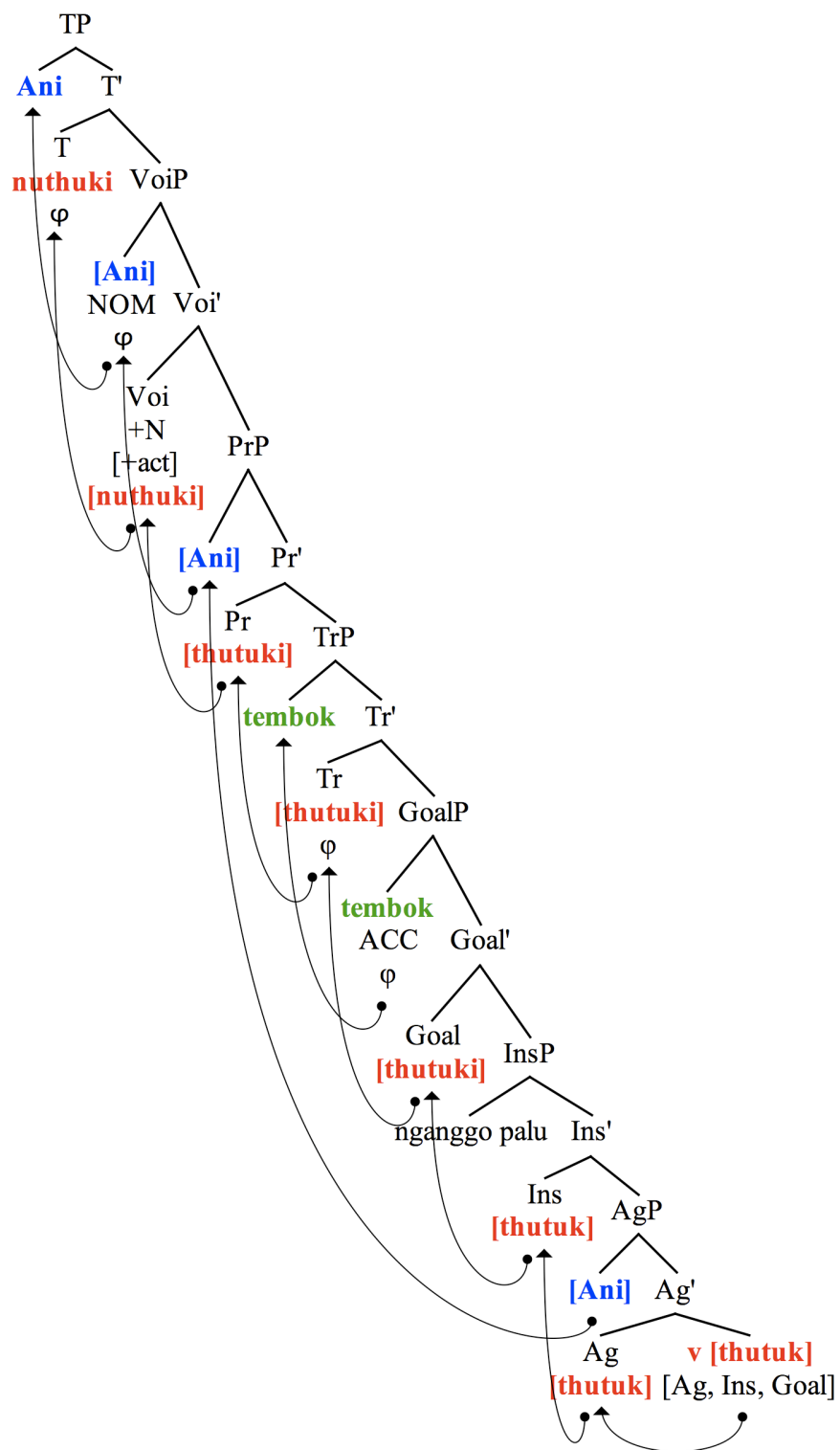
Mother-my act-sew outfit for younger sibling-my

‘My mother sewed an outfit for my younger sibling’



The thematic paraphrase for the Instrumental argument *-ake* repeated below in (113) works in a similar manner.

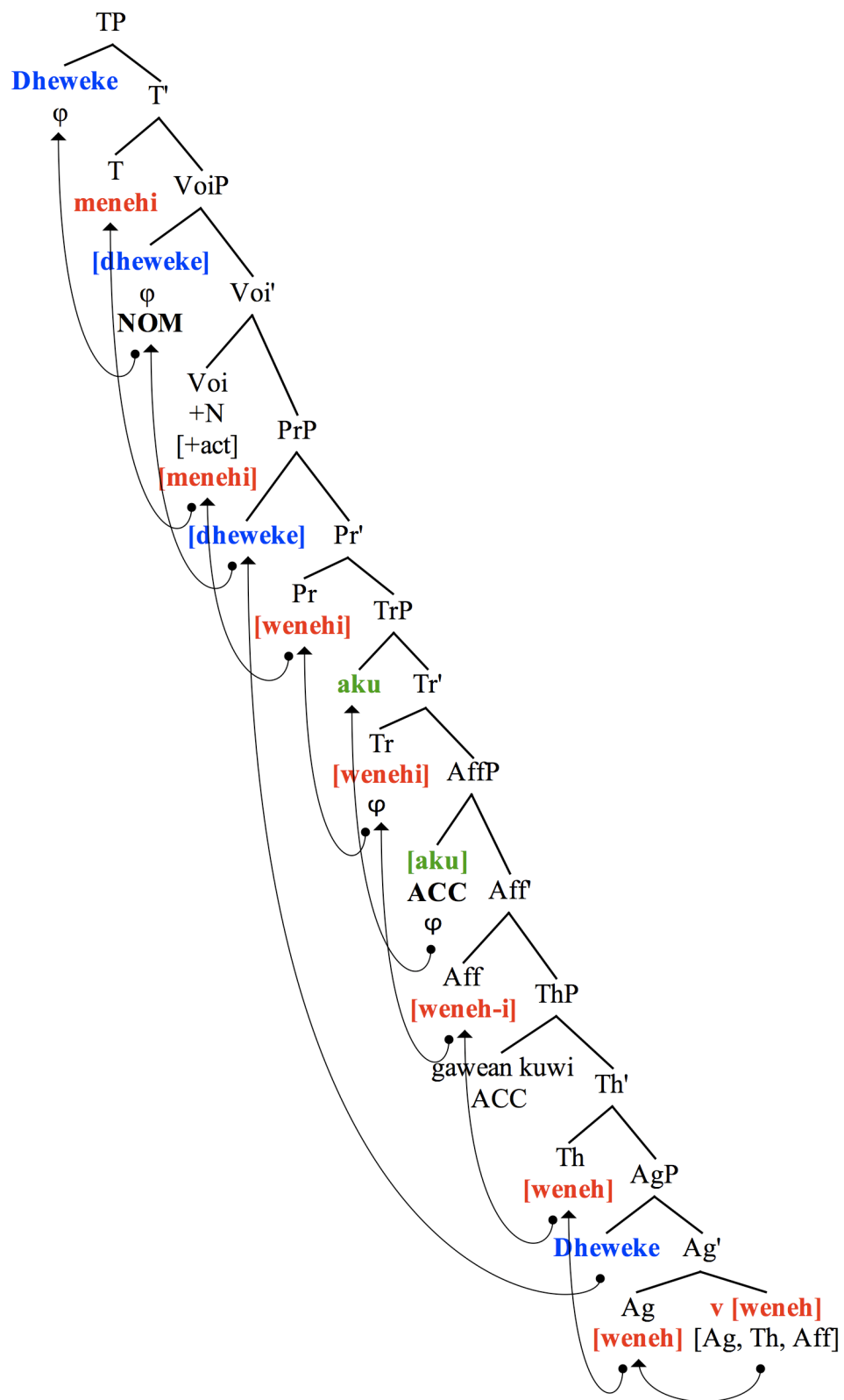
- (113) *Ani n-uthuk-i tembok nganggo palu.*
Ani act-hit-Appl wall with hammer
‘Ani hit a wall with a hammer’



In (113), a PP *nganggo palu* ‘with hammer’ is merged at the [Spec, Ins]. As a result, the goal argument *tembok* ‘wall’ must be applicativized with *-i*, merged at Aff head, to provide a DP goal for the ACC case-assigning probe in Voi.

Note that the thematic paraphrase for theme marker construction is slightly different with (112) and (113) because of the addition of suffix *-i* in the construction.

- (114) *Dheweke m-eneh-i aku gawean kuwi*
 S/he active-give-Appl me job that
 ‘S/he gave me that job’



In (114), the Aff category selects a DP with an unvalued case feature *aku* ‘I’ and the applicative *-i* is merged at the Aff-head. As a result, the probe in Tr assigns Acc to the Aff-DP and not to the Th-DP *gawean kuwi* ‘that job’. Th-DP is then marked with inherent ACC case.

It is important to point out here that there is no way for *-ake* to occur in more than one argument head at the same time because the only structural case other than Nom is Acc. Hence if *-ake* is generated in more than one head, one of the arguments will not be case marked and the derivation will crash.

5.4 Causative

I conclude this chapter by discussing briefly the last use of suffix *-ake* as a causative suffix. I argue that the causative *-ake* finds a natural analysis in Bowers’ (2010) framework. In the framework, the causative suffix is verbal morphology merged in a separate Causative (Cau) head. Moreover, the Cau head should be merged very low before the Ag head in the UOM. This is to account for the fact that in languages with both morphological causative and applicative, the causative suffix is usually merged immediately adjacent to the verb and then followed by the applicative suffix (Bowers, 2010: 145).

(115) Swahili

<i>Juma</i>	<i>a-li-m-chem-sh-e-a</i>	<i>motto maji</i>
Juma	SP-PAST-OP-boil-CAU- APPL -MOOD	child water
‘Juma boiled some water for the child’		

In (115), the causative suffix *-sh* is merged at the immediate right of the verb *chem* ‘to

boil’. This can be explained by merging Cau before Aff. With this order, the raised verb will adjoin first to Cau and then to Aff, resulting in the correct order of V+Cau+Appl.

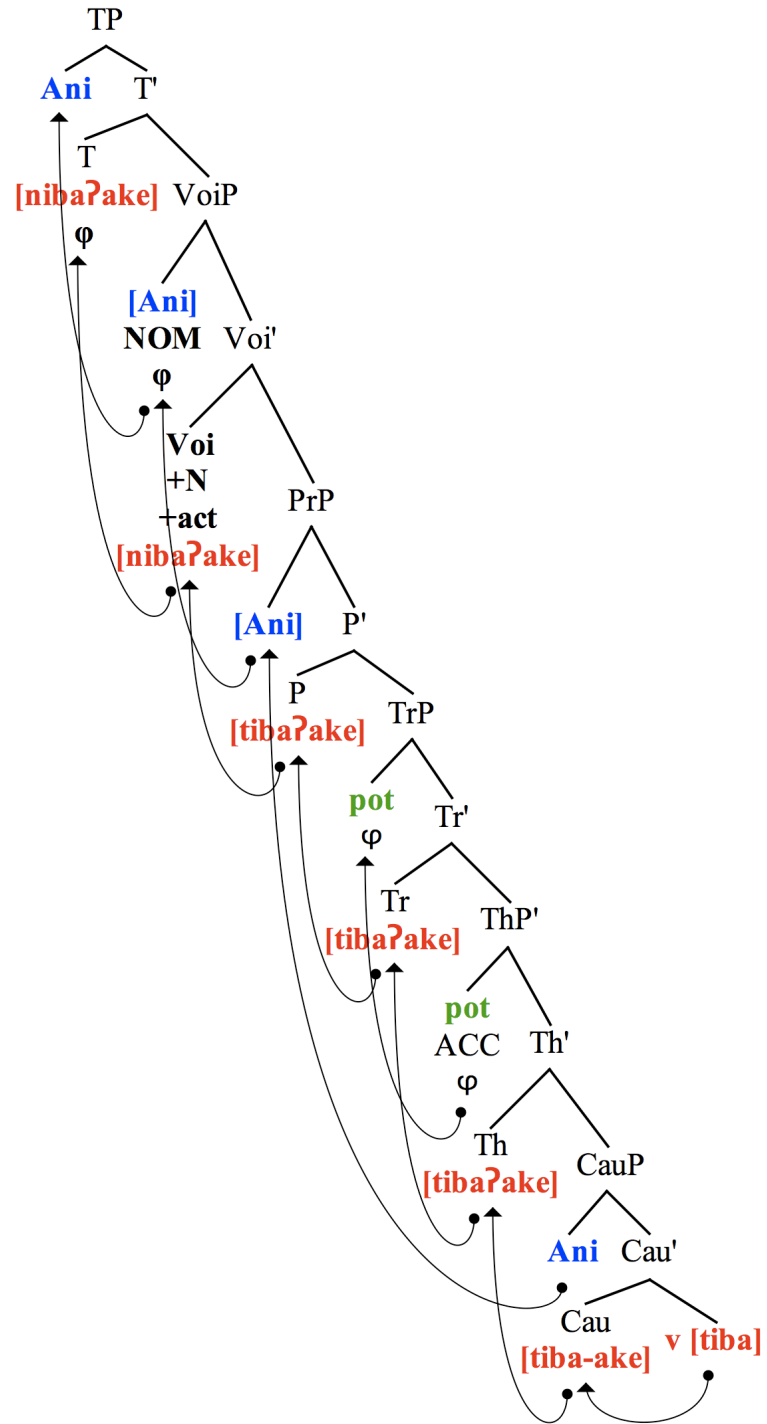
In Javanese, the causative and applicative suffixes are identical and cannot co-occur in the same sentence. However, similar to Swahili, the causative suffix *-ake* is a verbal morphology merged at the causative head. With this derivation, both unergative and unaccusative verbs can be causativized.

(116) The Representation of causative *-ake* with unaccusative verbs

Ani n-ibak-ake pot.

Ani act-fall-Appl pot

‘Ani made the pot fall’



In (116), the Cau-DP *Ani* is merged at the CauP at the bottom of the derivation. On the other hand, the Causative *-ake* is merged at the Cau head. The Cau DP is also case-marked nominative by the T head. First, it is moved to the Spec, Pr by the pure EPP feature at the Pr head. Consecutively, it moves to the Spec of Voi due to the EPP feature at the Voi head. The probe at the T head then values the Cau DP with Nominative case. On the other hand, the Th-DP *pot* is marked accusative by the probe at the Tr head before moves to the Spec of Tr.

The framework can also be applied to unergative verbs as follows.

(117) The representation of causative *-ake* with unergative verbs

Ani ng-lingguh-ake bayi-ne

Ani act-sit-Cau baby-Poss

‘Ani made her baby sit’

with an inherent case by the Ag head.

5.5 Conclusion

In sum, Bowers' (2010) framework solves the problems on the analysis of Javanese applicative construction. First, with its multiple argument heads, it can host the multiple functions of the suffix *-ake* by merging the suffix at the argument head with appropriate semantic. Second, it can represent the alternation between the applicative construction and its thematic paraphrase because the argument heads can select either a DP with an unvalued case feature or a PP. If a DP with an unvalued feature is merged, the derivation will result in an applicative construction. On the contrary, if a PP is merged, it will result in a thematic paraphrase. Third, it does not classify the applicatives into unnecessary distinction by proposing multiple heads for arguments with different semantic roles, such as benefactive, goal, and instrumental. Lastly, the framework can also explain the causative *-ake* by merging it at the Causative head at the bottom of the derivation.

CHAPTER SIX

JAVANESE PASSIVE

6.1 Introduction

Javanese has an interesting passive system, which includes (i) regular passive, (ii) ‘bare passive’ and (iii) adversative passive. Regular passive is formed by adding prefix *di-* to the verb.

(118) Javanese regular passive

Sega kuwi di-pangan Ani.

Rice that pass-eat Ani

‘The rice was eaten by Ani’

The ‘bare passive’ is not realized with suffix *di-*, hence the name, but with bound pronouns for first and second person singular.

(119) Javanese ‘bare passive’

a. *Sega kuwi tak pangan.*

Rice that 1stSing eat

‘The rice was eaten by me’

b. *Sega kuwi kok pangan*

Rice that 2ndSing eat

‘The rice was eaten by you’

Adversative passive indicates that the subject of the passive suffers from the action done by the agent. The agent can perform the action accidentally and is expressed with prefix *ke-*.

(120) *Ani ke-pidhak Tuti*

Ani Adv-step on Tuti

‘Ani was accidentally step on by Tuti’

The adversative passive is further discussed in chapter seven.

The most interesting feature of the passives is the position of their agents. The agent of the regular passive can be realized as a bare DP in immediate post-verbal position as in (121a), as a prepositional phrase at the end of the sentence as in (121b), or as a 1st or 2nd person bound pronoun in preverbal position as in (121c).

(121) The Three Agents of the Javanese Passive

a. Bare nominal agent - Postverbal

Tono di-tuko-kake Ani sega

Tono passive-buy-Appl Ani rice

‘Tono was bought by Ani some rice’

b. PP agent

Tono di-tuko-kake sega dening Ani

Tono passive-buy-Appl rice by Ani

‘Tono was bought some rice by Ani’

c. Bare pronominal agent- preverbal

Sega kuwi kok pangan

Rice that 2nd Sing eat

‘The rice was eaten by you’

Examples (121a-c) immediately raise a question of how the agent of the passive can be located in three different positions in the derivation. It should also be

noticed that the three positions of the agents of the passive in Javanese pose a significant problem for the representation of passive in general. Previous framework on passive is generally based on the by-phrase type of passive. It is clear that we need a new framework of passive which could account for the three positions of the passive agent in Javanese.

Moreover, the three agents have different forms. First, it can be observed from (121a, 121b) that the bare nominal agent and the PP agent are full NPs. On the other hand, the bare pronoun agents *tak* and *kok* are bound pronouns, appearing to be either clitics or prefixes in (121c).

Second, while the PP agent behaves like any other PP adjuncts, the bare pronoun agent and the bare nominal agent behave like a non-subject argument DP. We saw in section 3 that a non-subject argument DP in Javanese cannot be extracted to CP (A bar movement restriction) and that only adjuncts can do so. Hence the PP agent can be fronted with its head preposition in (122a) while the bare agents resist the process as seen in (122b) and (122c).

(122) The behavior of the agents of the passive

- a. *Dening Pardi, aku di-jupuk-ake buku*
by Pardi, I pass-get-Appl book
'I was picked a book by Pardi'
- b. **Pardi, aku di-jupuk-ake buku*
Pardi I pass-get-Appl book
'I was picked a book by Pardi'
- c. **Kok, sega kuwi pangan*

You, rice that eat

‘The rice was eaten by you’

As seen in (122a), topicalization of a PP agent is grammatical while it is impossible for the bare agents in (122b-c). This raises question on why passive agents display behavior of a core DP argument.

Third, the bare pronoun agent of the ‘bare passive’ displays subject trait with its ability to bind reflexives in (123b) like the agent of an active clause in (123a), while it is not the case with the PP agent and the bare nominal agent of the regular passive as seen in (123c-d).

(123) Javanese bare passive and subject traits

a. *Aku ora tau m-(p)ikir-ake awakku dewe*

I no ever act-think-Trans body-my self

‘I never think about myself’

b. *Awakku dewe ora tau tak-pikir-ake.*

body-my self no ever 1stSing-think-Trans

‘I never think about myself’

c. **Awak-e dhewe ora tau di-pikir-ake Ani*

body-poss self no ever pass-think-Trans I

‘Ani never thinks about herself’

d. **Awak-e dhewe ora tau di-pikir-ake dening Ani*

body-poss self no ever pass-think-Trans by Ani

‘Ani never thinks about herself’

In this chapter, I propose solutions for the problems related to Javanese

passive:

- (i) Are the bound pronouns *tak* and *kok* in the bare passive affixes or clitics?
- (ii) Why do the preverbal and the postverbal bare agents behave like core arguments?
- (iii) Why do *tak* and *kok* display subject traits unlike the other agents of passive?
- (iv) Where are the positions of the three agents of Javanese passive in the derivation?

I close my discussion with a review of previous frameworks on passive in general and Javanese passive in particular and subsequently propose a new framework to best represent the three positions of the agents of the Javanese passive in the derivation.

6.2 The bare pronoun agents of the bare passive: clitics or affixes?

We saw that the bare passive has preverbal agents in the form of the bound pronoun *tak* for the first person singular and *kok* for the second person singular. We also saw that the bound pronouns have similar distribution with the passive prefix *di-*, which also occurs preverbally. However, it is not clear whether *tak* and *kok* are affixes or clitics. In fact, both solutions have been proposed in literature on Javanese. Thus Ewing (2005), Campbell (1995), and Zoetmulder (1978) identify *tak* and *kok* as affixes while Connors (2008), Oglobin (2012), and Sato (2010) identify them as clitics. In this subsection, I provide evidence to support the analysis of *tak* and *kok* as clitics.

6.2.1 Historical account of *tak* and *kok*

I start my discussion with a brief historical account of *tak* and *kok*. Zoetmulder (1983), Adelaar (2011), and Oglobin (2012) observe that *tak* and *kok* are not passive prefixes in Old Javanese. Instead, Old Javanese uses verbal infix *-in-* to mark a passive verb. Later, the infix *-in-* is replaced by the prefix *den-* in Middle Javanese. The prefix *den-* is a compound from the noun *de-* ‘action’ and *n-* 3rd actor person marker for verbs. Therefore, *den-* is not used for the 1st and 2nd actor person. Modern Javanese further modifies *den-* into *di-* for the third actor person in the *ngoko* or low speech level.

On the other hand, *tak* originated from an early Javanese hortative deictic particle *nda* ‘there! come!’ followed by a clitic *-k*, a conjunctive particle with connotation of the first person (Adelaar, 2011). *Tak* alternates with 2nd person pronoun *ko* which later transforms into *kok-* of the bare passive (Oglobin, 2012). In Modern Javanese, the bound pronouns *tak* and *kok* are neutral with respect to tense, aspect and mood (Adelaar, 2011).

(124) Neutrality of the bound pronouns *tak* and *kok*

Iki dompetmu arep/ wis/ lagi tak seleh-ake neng meja

This wallet-2s POSS FUT PRF PROG 2ndSing put-Appl on table

‘Here’s your wallet, I’ll put it/ have put it/ am putting it on the table’

(Adelaar, 2011:6)

It should be noticed that the bound pronoun *tak* is different from the propositive clitic *tak/ dak/ ndak* which is a function word expressing a readiness or intention (Adelaar, 2011). The clitic derives from Old Javanese *ndak* expressing

intention by a first person and is different from the preverbal agent of the passive in three ways. First, the propositive *tak* can have an adverb inserted between it and the verb (125a) unlike the preverbal agent *tak* in (125b).

(125) Adverb Insertion for Propositive Clitic *Tak*

- a. *Aku tak dhewe ny-usul bapak*
 I PROPOS alone act-follow father
 ‘Let me by myself follow father’
- b. **Klambi kuwi tak dhewe jahit*
 Clothes that 1stSing alone sew
 ‘The clothes was sewn by myself’

Second, the propositive clitic *tak* can co-occur with the first singular pronoun *aku* ‘I’ (126a) while the preverbal agent *tak* cannot in (126b-c).

(126) Propositive Clitic *Tak* Co-occur with 1st Singular Pronoun

- a. *Aku tak ng-goreng iwak*
 I PROPOS act-fry fish
 ‘I intend to fry the fish’
 (Uhlenbeck, 1978: 121)
- b. **Aku iwak-e arep tak goreng*
 I fish-Def will 1stSing fry
 ‘I, the fish I am going to fry’
- c. **Iwak-e aku arep tak goreng*
 Fish-Def I will 1stSing fry

Third, the propositive *tak* describes immediateness of an action as seen by the

ungrammaticality of (127a) while *tak-* is neutral of tense and aspect as seen in (127b).

(127) The immediateness of the propositive clitic *tak*

a. **Aku tak nggoreng iwak wingi*

I PROPOS fry fish yesterday

‘I intended to fry the fish yesterday’

b. *Iwak-e tak-goreng wingi*

Fish-that 1st Sing-fry yesterday

‘The fish was fried by me yesterday’

It can be concluded that the bare pronoun agents of the bare passive *tak* and *kok* (i) do not derive from passive prefixes in Old Javanese, (ii) are neutral in tense, aspect and mood, and (iii) are different from the propositive clitic *tak*.

6.2.2 Clitics vs affixes

It is very difficult to define a perfect dichotomy of clitics and affixes based on their differences. Previous attempts such as the widely known clitic and affix test of Zwicky and Pullum (1993) prove to be problematic. As Heggie and Ordonez (2005) point out, Zwicky and Pullum’s (1993) criteria result in uncertain division of clitics and affixes. This is also the case with Javanese.

	Traits of <i>tak</i> and <i>kok</i>	Affix	Clitics
1.	They exhibit a low degree of selection since it can only be attached to a verb if the agent is a first or second person singular	No	Yes
2.	There is a gap: they are only applicable for first and second person only and not for third person	Yes	No
3.	There is no semantic idiosyncrasy. Their contribution of meaning to the sentence is identical to their contribution of their associated full forms.	No	Yes
4.	Morpho-phonological idiosyncrasy parameter, such as <i>will not -won't</i> , is not applicable in Javanese	NA	NA
5.	Syntactic operations apply to verbs attached to <i>tak-</i> and <i>kok-</i> . The verbs can be negated or fronted in interrogative question Fronting with <i>tak-</i> and <i>kok-</i> a. Buku kuwi ora <i>kok-jupuk</i> . Book that Neg 1 st Sing-take 'That book was not taken by you' b. ' <i>Kok-jupuk</i> ora buku kuwi? 2 nd Sing-takeNeg book that 'Didn't you take that book?'	Yes	No
6.	<i>Tak</i> and <i>kok</i> cannot attach to materials already containing clitics.	Yes	No

Table 11. Zwicky and Pullum's test (1993) on *tak* and *kok*

As seen in Table 11, according to criteria (2, 5, 6) *tak* and *kok* are affixes while based on criteria (1, 3), *tak* and *kok* are clitics.

To solve this problem, I turn to the Austronesian clitic typology. All Western Austronesian languages including Javanese have peripheral clitics appearing at the beginning or end of their host (Adelaar and Himmelman, 2005). The peripheral clitics are usually unstressed and form a prosodic unit with their hosts. Adelaar and Himmelman (2005) note that it is particularly difficult to differentiate proclitics

from affixes in the Western Austronesian languages. Standard Indonesian has expressions similar to *tak* and *kok* in the form of bound pronouns *ku* and *kau*, analyzed as clitics or affixes.

(128) Indonesian bound pronouns

Buku ini sudah ku/kau baca

Book that already 1st Sing/2nd Sing read

‘I/You already read that book’.

However, Adelaar and Himmelman (2005) propose three criteria to help distinguish clitics and affixes in Austronesian languages. One of the criteria is that clitics do not trigger morphophonological alternations of their host in contrast with affixes. This criterion is useful since Javanese nasal prefix triggers morphophonological alternation of their host by causing the onset of the first syllable of the root verb to delete.

(129) Morphophonological alternations triggered by nasal prefix

root	affixation	affixed words
------	------------	---------------

<i>tabrak</i> ‘hit’	N+ <i>tabrak</i>	<i>nabrak</i>
---------------------	------------------	---------------

<i>suwek</i> ‘rip’	N+ <i>suwek</i>	<i>nyuwek</i>
--------------------	-----------------	---------------

<i>kumbah</i> ‘wash’	N+ <i>kumbah</i>	<i>ngumbah</i>
----------------------	------------------	----------------

In contrast, *tak* and *kok* do not trigger similar changes to their host verbs.

(130) No morphophonological alternation triggered by *tak* and *kok*

root	affixation	affixed word
------	------------	--------------

<i>tabrak</i> ‘hit’	<i>tak</i> + <i>tabrak</i>	<i>taktabrak</i>
---------------------	----------------------------	------------------

<i>suwek</i> ‘rip’	<i>tak</i> + <i>suwek</i>	<i>taksuwek</i>
--------------------	---------------------------	-----------------

kumbah ‘wash’ *tak* + *kumbah* *takkumbah*

It can be concluded *tak* and *kok* are clitics because they differ from the nasal verbal prefix in that they do not have the ability to trigger morpho-phonological alternation to the host verbs unlike the nasal verbal prefix.

Since the unmarked passive prefix in Javanese is *di-*, it immediately poses a question on whether *di-* is a clitic or an affix. The passive prefix *di-* behaves like *tak* and *kok* in that it does not trigger morpho-phonological alternation to its verb host. However, upon a closer look, the prefix *di-* differs from clitics *tak* and *kok*. A passive construction with *di-* requires a pronounced agent in the form of a postverbal bare nominal agent as seen in (131), while it is not the case with *tak* and *kok*.

(131) Pronounced Postverbal Agent with Passive Prefix *di-*

- a. *Surti di-tabrak* *Ani wingi*

Surti pass-knock down Ani yesterday

‘Surti was knocked down by Ani’

- b. **Surti di-tabrak* (*Ani*) *wingi*

Surti pass-knock down (Ani) yesterday

‘Surti was knocked down (by Ani) yesterday’

- c. *Surti di-tabrak* *uwong wingi*

Surti pass-knock down person yesterday

‘Surti was knocked down by someone yesterday’

- d. ??? *Surti di-tabrak*.

Surti pass-knock down

‘Surti was knocked down (by someone)’

It can be observed that the bare nominal agent *Ani* cannot be omitted in (131b). Even when the agent is unknown, the construction with a generic third person *uwong* ‘someone’ in (131c) is more natural than the one without it in (131d)⁴.

In contrast, neither the bare nominal agent nor the PP agent can co-occur in a passive clause with *tak* as shown in (132b-c).

(132) No additional agents for *tak* and *kok*

a. *Surti tak-tabrak wingi*

Surti 1stSing-knock down yesterday

‘Surti was knocked down by me yesterday’

b. **Surti tak-tabrak aku wingi*

Surti 1stSing-knock down I yesterday

Surti was knocked down by me yesterday’

c. **Surti tak-tabrak dening aku wingi*

Surti 1st Sing-knock down by me yesterday

‘Surti was knocked down by me yesterday’

In conclusion, *di-* is not a pronominal clitic marking the third person agent since it still requires the agent to be present postverbally. Hence, the main function of the suffix *di-* is as a default passive prefix in Javanese.

⁴ Under very special circumstances, the agent can only be totally omitted from the clause when the event described by the verb is already understood or expected.

Omah-e wis di-bangun.

House-Def already passive-build

‘The house has been built’

6.3 The VP argument behavior of the bare agents

We saw earlier in chapter 3 that there is a restriction of A bar movement for non-subject arguments in Javanese. This restriction also applies to the bare agents as seen in (133) where fronting is prohibited for the two agents but permitted for the PP agent. The VP argument behavior of the two latter agents can also be seen in adverb insertion and Wh-extraction. It can be further observed that it is impossible to insert an adverb between the verb and the bare agents in (133).

(133) Adverb insertion test for bare agents

- a. *Aku di-jupuk-ake buku cepet-cepet dening Pardi*
I pass-get-Appl book hurriedly by Pardi
'I was picked a book hurriedly by Pardi'
- b. **Buku tak cepet-cepet jupuk kanggo Pardi*
Book 1st Sing quickly take for Pardi
'I quickly picked the book for Pardi'
- c. **Buku-ne di-jupuk cepet-cepet Surti kanggo Pardi.*
Book-Def pass-get quickly Surti for Pardi
'The book was quickly picked by Surti for Pardi'

In (133b-c) the bare agents behave like a verbal complement by resisting adverb insertion between them and the verb.

Moreover, the bare agents show another characteristic of VP arguments in their inability to be extracted with Wh-question in (134) and (135).

(134) Wh-extraction of preverbal bare pronoun agent: ungrammatical

- a. *Omah-e tak resik-i.*

House-this 2ndSing clean-Appl

‘The house was cleaned by me’

- b. **Sapa sing omah-e resik-i?*

What Rel house-Def clean-Appl

‘Who cleaned the house?’

(135) Wh- extraction of postverbal bare nominal agent: ungrammatical

- a. *Omah-e di-resik-i Marni*

House-def pass-clean-loc Marni

‘The house was cleaned by Marni’

- b. **Sapa sing omahe di-resik-i?*

Who Rel house-def pass-clean-Appl

‘Who cleaned the house?’

In contrast, Wh-extraction is grammatical for PP agent as seen in (136).

(136) Wh-extraction of prepositional agent: grammatical

Dening sapa omah-e di-resik-i?

By whom house-def pass-clean-Appl

‘By whom the house was cleaned?’

In sum, the bare agents of Javanese behave like a VP argument in terms of their inability to be fronted, to have an adverb insertion and to undergo Wh-extraction. In contrast, the same constraints do not apply to the PP agent which behaves like an adjunct.

Why do passive agents behave like an argument DP in Javanese by resisting CP extraction and adverb insertion? I first discuss the bare pronoun agent clitics and the verb. It is not surprising that linear adjacency is required between the verbal clitic and its host verb. Many languages show similar adjacency as well. Martins (2007) observes that there is a strong preferred linear adjacency between clitic and verb in Old Romance. Contemporary Romance clitics with the exception of Portuguese also require strict adjacency to their host verb. There is no independent lexical material, not even negative or emphatic particles that can intervene between the clitics and the host carrying all the other inflectional morphology (Franco, 2001: 164).

(137) Spanish object clitic

a. **Juan lo ya vio*

Juan ACC-CL already saw

‘Juan already saw it’

b. *Juan ya lo vio*

Juan already ACC-CL saw

‘Juan already saw it’

(Franco, 2001: 164)

For the postverbal agent, I propose that the behavior is caused by the nature of CP extraction and adverb insertion between arguments in Javanese. Aldridge (2008), who observes similar phenomenon in Indonesian, proposes that the restriction is caused by the fact that the verbal prefix N- prevents the v head from carrying an EPP feature. As a result, the theme argument cannot move to Spec, v and is not accessible for the probe in CP. Moreover, Aldridge (2008) proposes that the EPP feature on v has

a strong D feature, which does not prevent fronting of non-DPs. This explains the ability of the PP agent to be extracted to CP position.

It is only natural that the bare pronoun agent cannot undergo A-bar movement because it is a bound pronoun. What about the bare nominal argument? It can be assumed that the passive prefix *di-* also prevents the extraction of the arguments below it since both bare nominal agent and the theme argument cannot be extracted to CP position as seen in (138b-c).

(138) CP extraction of arguments below the passive prefix *di-*

- a. *Marni di-mangsak-ake ibu jangan gori*
 Marni passive-cook-Appl mother soup young jackfruit
 ‘Marni was cooked young jackfruit soup by mother’
- b. **Sapa sing Marni di-mangsak-ake jangan gori?*
 Who REL Marni passive-cook-Appl soup young jackfruit
 ‘Who was Marni cooked the young jackfruit soup for?’
- c. **Apa sing Marni di-mangsak-ake ibu?*
 What REL Marni passive-cook-Appl mother?
 ‘What was mother cooked for Marni?’

In conclusion, the A-bar movement restriction on the bare agent is explained by the lack of EPP feature in vP head triggered by the verbal prefix in Javanese. On the other hand, the movement is possible for the PP agent adjunct.

I now discuss adverb insertion restriction between the verb and the argument. I posit that the behavior is common between arguments in Javanese. Adverb insertion is also prohibited between the bare nominal agent and the theme argument as seen in

(139).

(139) Adverb insertion in applicative construction

a. *Aku di-weneh-i Surti buku kuwi*

I pass-give-Appl Surti book that

‘I was given that book by Surti’

b. **Aku di-weneh-i wingi Surti buku kuwi*

I pass-give-Appl yesterday Surti book that

‘I was given that book by Surti yesterday’

c. **Aku di-weneh-i Surti wingi buku kuwi*

I pass-give-Appl Surti yesterday book that

‘I was given that book by Surti yesterday’

However, adverb insertion is grammatical between the bare nominal agent and a prepositional phrase expressing an instrumental argument in a thematic paraphrase of an instrumental applicative construction in (140b).

(140) Adverb insertion in thematic paraphrase

a. *Aku di-thutuk Surti nganggo buku kuwi wingi*

I pass-hit Surti with book that yesterday

‘I was hit by Surti with that book yesterday’

b. *Aku di-thutuk Surti wingi nganggo buku kuwi*

Aku pass-hit Surti yesterday with book that

‘I was hit by Surti yesterday with that book’

I argue that the behavior of Javanese adverbs can be explained by the framework of Bowers (2002) on transitivity. Bowers observes the following facts

about V-modifying adverbs in English:

- (i) V-modifying adverbs are always postverbal, regardless of the verb's valence;
- (ii) they are prohibited between the verb and an accusative case-marked object;
- (iii) they may always occur between the verb and a non-accusative-case-marked complement.

Bowers (2002) illustrates the facts above with the following examples:

(141) The position of V-modifying adverb in English

- a. John (*perfectly) rolled (*perfectly) the ball (perfectly) (down the hill).
- b. The ball (*perfectly) rolled (perfectly) (down the hill).
- c. John (*intimately) spoke (intimately) to Mary.
- d. Mary (*raucously) laughed (raucously).
- e. It (*torrentially) rained (torrentially).

Bowers (2002) argues that this can be explained with the existence of another functional category, the Transitive Phrase (TrP) that is optionally selected by the category Pr. The TrP is absent when a clause has an unergative or an unaccusative verb. Moreover, there are two important movements and their consequences in the framework:

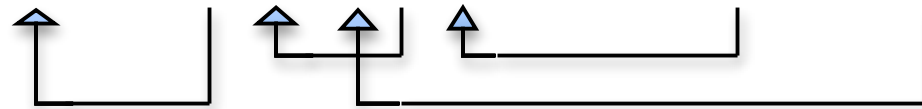
- (i) Tr head can assign an accusative case to an argument in Spec, V and then moves it to SpecTr to satisfy the EPP feature in Spec, Tr. As a result, a V-modifying adverb can never end up between the verb and its object because accusative case marked DP always moves out of VP to the Spec of Tr.
- (ii) All verbs move in successive-cyclic fashion, first to Tr and then to Pr. As a result, any V-modifying adverb will end up at the right of the verb because all verbs end up at

the Pr head.

(142) V-adverb position in Bowers' (2002) framework of Transitivity

John rolled the ball perfectly.

[TP T[PrP John Pr [TrP Tr [VP perfectly [V' [V roll] [the ball]]]]]]]



NOM

ACC

In (142), the verb *roll* undergoes cyclic movements to Tr and then Pr while the accusative-case-marked DP *the ball* moves to Spec, Tr. As a result, the V-modifying adverb *perfectly* ends up at the right of the verb after the accusative case marked DP, *the ball*.

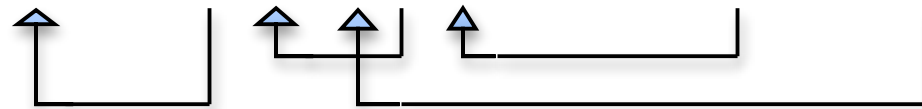
I posit that Javanese is similar to English in that the VP-modifying adverb should appear after the Tr phrase. This explains why the adverb cannot be inserted between the bare nominal agent and the theme argument.

(143) *Surti ng-guwang uwuh wingi*

Surti act-throw rubbish yesterday

‘Surti threw some rubbish’

[TP T[PrP Surti Pr [TrP Tr [VP wingi [V' [V ngguwang] [uwuh]]]]]]]



NOM

ACC

Moreover, Bowers (2002) framework provides a clue on the position of the bare nominal agent in Javanese. Since the theme argument is located at the Spec of Tr,

the suitable location for the bare nominal agent is at the Spec of Pr, the closest higher projection. I give a more detailed discussion on the matter in subsection 6.6.

6.4 The subject traits of the preverbal agents *tak* and *kok*

There has been a debate among Austronesian linguists on the passiveness of the ‘bare passive’. Many consider the bare passive as a pseudo passive (Dardjowidjojo 1978, Chung 1976, Uhlenbeck 1978). However, there is evidence that the bare passive is a real passive and not just a fronted object construction. First, as we saw from subsection 6.2, an object cannot be fronted to a CP position. Arka and Manning (1998) observe that in Indonesian, the theme argument in the bare passive shows traits that exclusively belong to subjects in the language: the ability to be relativized as seen in (144b). In contrast, relativization is prohibited for a topicalized object in Indonesian as seen in (144b).

(144) Relativization of a theme argument of a ‘bare passive’ in Indonesian

a. *Orang itu saya ajak ke sini.*

Person that 1stSing invite here

‘The person I invited to come here’

b. *Orang itu yang saya ajak ke sini.*

Person that REL I invite here

‘That is the person that I invited to come here’

(145) Relativization of a topicalized object in Indonesian

- a. *Orang itu, saya meng-ajak dia ke sini.*

Person that I act-invite him here

‘That person, I invited him to come here’

- b. **Orang itu yang saya meng-ajak ke sini.*

Person that REL I act-invite here

‘It was that person that I invited to come here’

(modified from Arka and Manning, 1998)

The same phenomenon can also be observed in Javanese. The theme argument in the bare passive can be relativized as seen in (146a-b) while it is not the case with the topicalized object in (146c-d).

(146) Relativization of the theme argument of a bare passive in Javanese

- a. *Uwong kuwi tak ajak mrene.*

Person that 1stSing invite here

‘The person I invited to come here’

- b. *Uwong kuwi sing tak ajak mrene.*

Person that Rel 2nd Sing invite here

‘The person that I invited to come here’

- c. *Uwong kuwi, aku ng-ajak dheweke mrene.*

Person that I act-invite him/her here

‘That person, I invited him to come here’

- d. **Uwong kuwi sing aku ng-ajak mrene.*

Person that Rel I act-invite here

‘The person that I invited to come here’

However, it can also be observed that the agent of the bare passive in Indonesian and Javanese does not lose its subject traits as what is expected of an agent of a passive construction. Arka and Manning (1998) observe that the agent of the bare passive in Indonesian can bind reflexive.

(147) Indonesian bare passive reflexive binding

- a. *Diri-saya* *saya serah-kan* *ke polisi.*
self-1sg 1sg surrender-Appl to police

‘I surrendered myself to the police.’

(Arka & Manning 1998:8)

- b. ?**Diri saya* *di-serah-kan* *ke polisi oleh saya.*
self-3sg.Gen Pass-surrender-Appl to police by Amir

‘I surrendered myself to the police.’

(Arka & Manning, 1998:5)

This is also the case with Javanese. I replicate the analysis with Javanese in (148) and it can be observed that only the bare pronoun agent of the ‘bare passive’ can bind reflexive in (148b) while the bare nominal agent and the PP agent cannot in (148c-d).

(148) Javanese bare passive reflexive binding

- a. *Aku* *ora* *tau* *m-(p)ikir-ake* *awak-ku dewe*
I no ever act-think-Appl body-my self

‘I never think about myself’

- b. *Awak-ku dewe ora tau tak-pikir-ake.*
 body-my self no ever 1stSing-think-Appl
 ‘I never think about myself’
- c. **Awake dheweke ora tau di-pikir-ake Pardi*
 Body self-3rd ever think pass-think-Appl Pardi
 ‘Pardi never thinks of himself’
- d. **Awake dheweke ora tau di-pikir-ake dening Pardi*
 Body self-3rd ever think pass-think-Appl by Pardi
 ‘Pardi never thinks of himself’

Another subject trait is seen by the ability of the bare pronoun agent to control a PRO in an embedded non-finite CP as observed by Chung (1976), Hopper (1983), Musgrave (2001), and Aldridge (2008).

(149) PRO control of bare passive

Ember kuwi tak jupuk kanggo PRO ngangsu banyu
 Pail that 1st Sing get to fetch water
 ‘I got the pail to fetch some water from the well’

To solve the mystery posed by the subject traits of the bare pronoun agent of the bare passive, I refer to the framework of Aldridge (2011) on ergative-to-accusative transition in Austronesian languages. Austronesian ergative analysis originated in the focus system in the language family. Tagalog, which still retains most of its ergative syntax, gives a perfect illustration of how this focus system works. The argument ‘in focus’ is indicated by (i) a set of verbal affixes which differ according to the semantic role of the focused NP (e.g. Agent, Patient, Instrument, etc.) and (ii) a set of case

markers for NPs (Klamer, 2002).

(150) Tagalog focus system

a. Agent focus

B-um-ili' si Maria ng tinapay sa tindahanon

buy-Ag.Focus foc Mary pat bread loc store

‘Mary is buying/bought some bread at the store’

b. Patient Focus

B-in-ili' ni Maria ang tinapay sa tindahan

buy-Pat.Focus/perf ag Mary foc bread loc store

‘Mary bought the bread at the store’

c. Locative Focus

B-in-ilh-a' n ni Maria ng tinapay ang tindahan

buy-perf-Loc.Focus ag Mary pat bread foc store

‘Mary bought some bread at the store’

(Klamer, 2002).

In (150), the verbal affixes *-um-*, *in-*, and *-an* indicate whether either the Agent, or the Patient or the Location NP is ‘in focus’ while the focused NP is marked with the morphemes *si* (for proper names) or *ang* (for other nominals) (Klamer, 2002). An ergative analysis of Tagalog yields the following result:

(151) Tagalog ergative system

a. *Natulag ang lalaki* INTRANSITIVE

slept ABS man

‘The man slept’

b. *Nakita ng lalaki ang hayop* TRANSITIVE

saw ERG man ABS animal

‘The man saw the animal’

c. *Nakakita ang lalaki ng hayop* ANTIPASSIVE

APAS.see ABS man OBL animal

‘The man saw the animal’

(Klamer, 2002).

As Aldridge (2011) describes, the antipassive construction in (151c) is semantically transitive because it has two DP arguments. However, it has intransitive case-marking since the agent is marked as absolutive while the theme is marked as oblique. The antipassive then undergoes a reanalysis into a transitive clause which results in a split ergative syntax. In turn, the split ergative syntax can further transition into a full accusative syntax by reanalyzing the transitive ergative syntax into a passive clause.

(152) The transition of ergative syntax into accusative syntax

Antipassive → transitive → passive

ergative syntax split-ergative syntax accusative syntax

Aldridge (2011) claims that the ‘bare passive’ originated from a transitive ergative construction, a remnant of Austronesian ergative syntax. Hence, in Javanese, the antipassive has undergone a complete transition into a transitive clause but an incomplete transition into a passive clause.

The first piece of evidence of the ergative trace in the bare passive is seen by the ability of the preverbal agent to bind a reflexive and to control PRO. The second

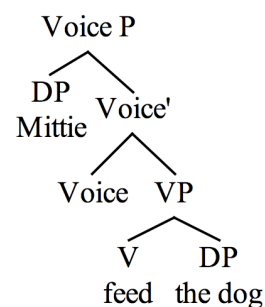
piece of evidence is that the theme argument in the subject position can be relativized and clefted. This is in line with Manning 's (1996) finding on Tagalog. In Tagalog, an ergative DP can bind an anaphor in absolutive or oblique while the absolutive DP can be extracted through relativization, clefting or Wh-question.

It can be concluded that Javanese preverbal agent has two subject traits, the ability to bind reflexive in the theme argument to control PRO. The subject traits indicate an incomplete transition from an ergative into an accusative syntax in Javanese bare passive based on Aldridge's (2011) framework.

6.5 Previous frameworks on the representation of passive

In this section, I discuss previous frameworks on passive. The different position of the agent in an active and a passive clause has generated a lot of interest in syntax. The agent of active is widely believed to originate at the Spec of the Voice head following Kratzer (1996). The category of Voice is equivalent to little v head proposed by Chomsky (1995).

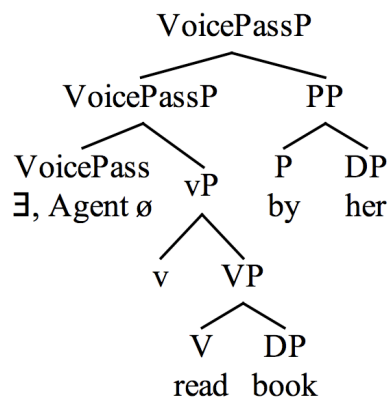
(153) The position of an agent in an active clause based on Kratzer (1996)



The agent of the passive is usually represented in a different structure. Hence, although a passive clause also contains a Voice head introducing the agent as an external argument, its agent is realized by a bundle of \emptyset -features on Voice and is physically spelled out as an adjunct in a by-phrase (Pylkkänen 1999, Embick 2004, Landau 2006).

(154) The by-phrase as an adjunct

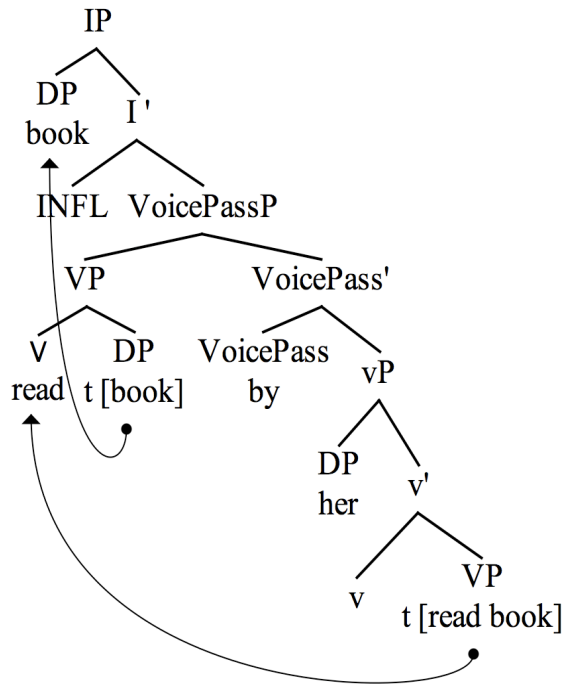
The book was read by her.



Collins (2005) attempts to generate a single structure for the active and passive clauses. He proposes that the *by-phrase* can be derived from the same underlying position as the subject of the active by merging it at the Voice Pass head. To explain why the passive by-phrase occurs to the right of the theme argument, Collins (2005) offers a smuggling analysis. The verb phrase is smuggled from inside the vP past the external argument in the VoicePass to land at VoicePassP as a sister of VoicePass'. The theme DP inside the smuggled VP is then raised to the spec of T.

(155) Collins's (2005) Passive Representation

The book was read by her.

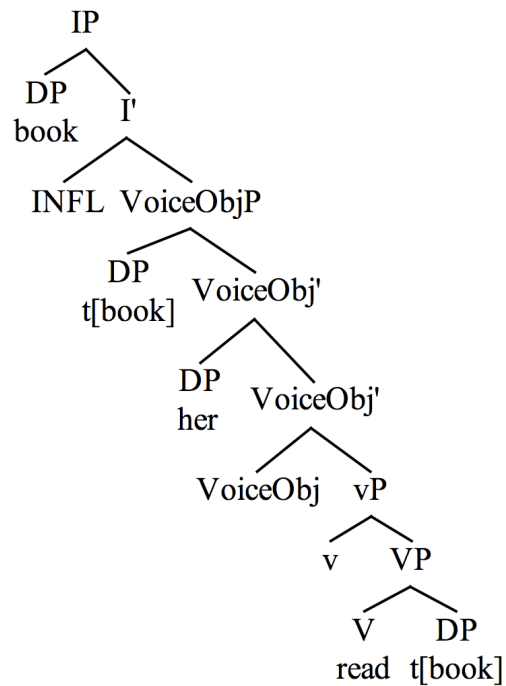


Unfortunately, Collins (2005) can only explain the position of the PP agent and not those of the bare agents. Legate (2010) argues that Collins's (2005) solution cannot account for the bare passive since the verb precedes the agent while a bare passive agent should immediately precede the verb. In other words, the smuggling analysis results in the wrong word order of the bare passive construction.

As an alternative analysis, Legate (2010) offers leap-frogging with successive-cyclic movement through the edge of the voice. In her framework, the VoiceP is merged high in the derivation between IP and vP. The theme DP leapfrogs through the edges of the Voice to occupy the SpecVoice. On the other hand, the agent DP is

merged underneath the moved Theme DP at Voice'.

(156) Legate's (2010) leap-frogging solution



However, it can be observed that Legate's (2010) solution can only explain the position of the preverbal bare pronoun agent but not the postverbal bare nominal and the PP agents.

Another theory is from Kunio Nishiyama (2002) who offers a solution with his abstract clitic position hypothesis based on his analysis of Indonesian passive as follows:

- (i) The object trace activates the abstract clitic position
- (ii) The activated clitic position must be phonologically licensed
- (iii) The clitic position is phonologically licensed either by being filled with a prefix or

by having a head.

Nishiyama (2002) bases his claim on his observation that object movement in Indonesian is not the result of passivization, but it is the motivation or the cause of passivization. As previously discussed, object extraction is impossible in Indonesian. However, extraction becomes possible once the clause is passivized in (157c).

(157) Object Extraction after Passivization in Indonesian

- a. **Ini buku yang mem-beli orang itu*
This book Rel act-buy person that
‘This is the book that the person bought’
- b. *Buku ini di-beli orang itu*
Book this pass-buy person that
‘The book was bought by that person’
- c. *Ini buku yang di-beli orang itu*
This book Rel pass-buy person that
‘This is the book that person bought’

Hence, based on Nishiyama (2002), passivization is triggered by object extraction to the CP position. The object trace will in turn trigger an abstract clitic position preverbally or postverbally, expressing the agent of the passive. Once the clitic is activated, the verb must be in the passive form. The abstract clitic position must then be phonologically filled with a prefix or a head adjacent to it. In Indonesian, the position is filled with free or bound pronouns or by *di-* for the third person. Nishiyama (2002) further argues that the existence of this abstract clitic provides evidence for the post syntactic morphology in the sense of Distributed Morphology of

Halle and Marantz (1993).

While the abstract clitic position hypothesis seems to be convenient, it immediately poses the question why some clauses will stop at passivization, while others continue to CP object extraction. If indeed passivization is a by-product of CP object extraction, how can the hypothesis explain the productivity of passive in Javanese? Why do some passive clauses fail to complete the process of extracting the object to CP position? Clearly, the hypothesis has unsolved problems that need further explanation.

Another hypothesis is proposed by Connors (2001) based on his observation of Indonesian. Connors (2001) claims that the agent of the passive is based generated at V^0 . In the bare passive, the agent remains in its original position. However, in the regular passive with *di-*, the verbal prefix triggers the verb to raise over the agent to a position below the auxiliary. This hypothesis is problematic because there is no explanation of why the verbal prefix *di-* can trigger a verb raising. Moreover, the hypothesis cannot account for the position of the prepositional agent.

6.6 New representation of Javanese passive

In this section, I propose a new representation of the Javanese passive. I base my proposal on Legate (2010), Merchants (2013) and Bowers' (2010) framework. First, I agree with Legate (2010) that the Voice Phrase should be originated high in the derivation above the vP. However, the agents of the passive in the current framework are not originally merged in the Voice P. On the contrary, they start from the same position low in the derivation.

I provide evidence for the high position of the VoiceP with Merchant's (2013) framework. Merchant (2013) observes that there are voice mismatches in ellipsis. This is unusual since ellipsis must satisfy identity and license requirement with its antecedent, which makes voice mismatch intolerable. However, voice mismatch between elided verb phrase and its antecedent is tolerated in English.

(158) The janitor must remove the trash whenever it is apparent that it should be
<removed>.

(159) The system can be used by anyone who wants <to use it>.

(Merchant, 2013: 3)

On the contrary, there is no possible voice mismatch in big ellipsis such as sluicing, fragment answers, gapping, and stripping.

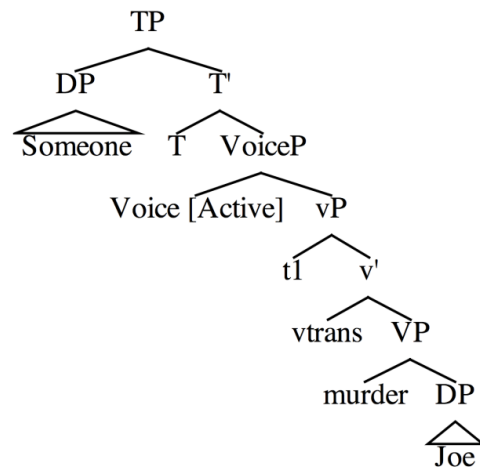
(160) *Joe was murdered, but we don't know who.

(161) *Someone murdered Joe, but we don't know who by.

(Merchant, 2013: 5)

Merchant (2013) argues that the voice mismatch is possible if the VoiceP is a separate head merged high in the derivation between TP and vP.

(162) Merchant's Voice Phrase



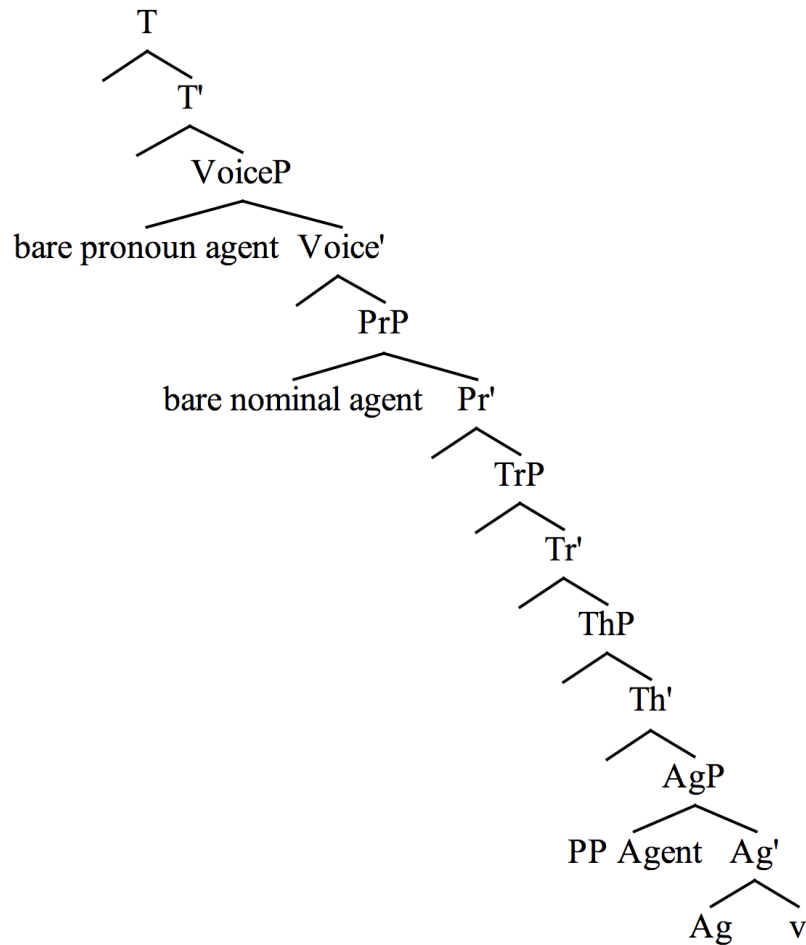
(Merchant, 2013: 14)

As a consequence of the high position of the VoiceP, the voice head will not be included as a target of the VP ellipsis, hence the possibility of voice mismatch. In contrast, in bigger ellipsis, the VoiceP is included and is therefore a subject of elliptical identity requiring antecedent to have the same voice with the elided part (Merchant, 2013).

Now I discuss the positions of Javanese passive agents in the derivation. Bowers (2010) argues that agent originates low in the derivation at the Spec of the Agent phrase. Following Bowers' (2010), I propose the following positions for the three passive agents:

- (i) the bare pronoun agent is at the Spec of Voice
- (ii) the bare nominal agent is at the Spec of Pr
- (iii) the PP agent is merged down below at the Spec of Ag head

(163) The positions of the agents of the passive in Javanese



I discuss first the position of the bare pronoun agent. For sure, the agent is not located at T because it is impossible to insert a modal between it and the verb.

(164) Adverb insertion for Javanese bare passive

**Iwak kuwi tak arep goreng.*

Fish that 1stSing will fry

‘The fish I am going to fry’

In (164), it is impossible to insert the future modal *arep* between the clitic *tak* and the verb *goreng* ‘fry’.

I posit that the bare pronoun agent is merged at the Spec of Voice. I base my argument on the fact that the agent has the same distribution with the passive prefix *di-*. However, unlike *di-*, the clitics *tak* and *kok* are not base generated at the Spec of Voice, but moved from a lower position in the derivation. This is due to the fact that *tak* and *kok* are different in nature from *di-*, in that they are pronominal clitics for the first and second singular agents and not passive prefixes.

Next, I discuss the position of the bare nominal agent. From previous discussion on the position of the Voice Phrase and the Transitive Phrase, we gather the following facts:

- (i) The VoicePhrase is merged high between the TP and the TrP
- (ii) The verb is located at the Voice Phrase head
- (iii) The theme argument moves from the ThemeP to the Spec of TrP.

Considering the facts above and the immediate postverbal position of the bare nominal agent, the only possible position for the agent is between the Voice Phrase and the TrP, at the Spec of the Pr head. If the hypothesis is correct, we expect that the agent at the Pr head will c-command the Transitive head hosting the theme argument in line with Kayne’s (1999) LCA. Moreover, as is well known, the first NP in the double object construction [V NP1 NP2] binds the second NP but not vice versa (Kuno, 1987). Barrs and Lasnik (1986) confirm this asymmetry with a variety of tests including reflexive binding, bound variable pronouns and the distributions of negative polarity items.

(165) Reflexives or anaphors must be c-commanded by their antecedents

- a. I show John himself in the mirror.
- b. *I show himself John in the mirror.

(Barrs and Lasnik, 1986: 347)

(166) A quantifier must c-command a pronoun at S-structure to bind it. Double objects show asymmetries regarding quantifier pronoun binding ability.

- a. I denied each worker their paycheck
- b. *I denied its owner each paycheck.

(Barrs and Lasnik, 1986: 348)

(167) Construction with *each... the other* only has reciprocal reading when the phrase with *each* c-commands the phrase with *the other*.

- a. I gave each man the other's watch.
- b. *I gave the other's trainer each lion.

(Barrs and Lasnik, 1986: 349)

(168) Negative polarity item must be c-commanded by a negated antecedent.

- a. I gave no one anything.
- b. *I gave anyone nothing

Similar binding tests on Javanese prove that the bare nominal agent c-commands the theme argument. First, I administer a reflective binding test adjusted from the same test performed by Arka and Manning (1998) with Indonesian.

(169) Reflexive test for the agents and the theme argument

- a. *Pardi1 di-duduh-i Ani2 foto-ne dheweke2*
 Pardi pass-show-Appl Ani picture-Poss self-3rd
 ‘Pardi was shown by Ani her picture (Ani’s picture)’
- b. **Pardi1 di-duduh-i foto-ne dheweke2 Ani2*
 Pardi pass-show-Appl picture-Poss self-3rd Ani
 ‘Pardi was shown her picture (Ani’s picture) by Ani’
- c. **Pardi1 diduduh-i foto-ne dheweke2 dening Ani2*
 Pardi pass-show-Appl picture-Poss self-3rd by Ani
 ‘Pardi was shown her picture by Ani’

As seen in (169), the postverbal agent can c-command the theme argument as seen by the ability of the agent *Ani* to bind reflexive in *fotone dheweke* ‘his/her photo’ in (169a) but not vice versa as seen in (169b). It can also be observed that the PP agent fails to bind the theme argument as seen in (169c).

The result is confirmed with other tests in the Barrs and Lasnik’s (1986) for QNP-pronoun.

(170) QNP-Pronoun test

- a. *Pardi1 di-weneh-i kabeh guru2 buku-ne dhewe dhewe2*
 Pardi pass-give-Appl all teacher book-Poss their own
 ‘Pardi was given by each teacher their books’
- b. **Pardi di-weneh-i buku-ne dhewe-dhewe2 kabeh guru2*
 Pardi pass-give-Appl book-Poss their own all teacher
 ‘Pardi was given their books by each teacher’

- c. **Pardi di-weneh-i buku-ne dhewe-dhewe2 dening kabeh guru2*
 Pardi pass-give-Appl book-Poss their own by all teacher
 ‘Pardi was given their books by each teacher’

As seen in (170a), the postverbal agent *kabeh guru* ‘all teacher’ can c-command the theme argument *bukune dhewe-dhewe* ‘his or her own books’ but not vice versa in (170b). In addition, the PP agent cannot c-command the theme argument as seen in (170c).

Further evidence is provided by *the each the other* construction which also shows that the postverbal agent c-commands the theme argument as seen in (171).

(171) The each other construction

- a. *Amir1 di-weneh-i kabeh bocah2 buku-ne liyane2*
 Amir pass-give-Appl all child book-Poss other
 ‘Amir was given by each child each other’s book’
- b. **Amir1 di-weneh-i buku-ne liyane2 kabeh bocah2*
 Amir pass-give-Appl book-Poss other each child
 ‘Amir was given each other’s book by each child’
- c. **Amir di-weneh-i buku-ne liyane2 dening kabeh bocah2*
 Amir pass-give-Appl book-Poss other by all child
 ‘Amir was given each other’s book by each child’

In (171a), *each* c-commands *the other* which shows that the postverbal agent c-commands the theme argument but not vice versa as seen in (171b). Moreover, the PP agent cannot c-command the theme argument as seen in (171c). To conclude, the evidence shows that the bare nominal agent c-commands the theme argument which

proves that the agent is in the Pr head.

It can also be observed that an Affectee c-commands a PP agent as shown by the bound variable anaphora test in (172).

(172) Bound Variabel Anaphora

a. *Buku di-weneh-ake kabeh bocah dening ibu-ne dhewe-dhewe*

Book pass-give-Appl all child by mother-Poss self

‘Books were given to each child by their own mothers’

b. **Buku di-weneh-ake ibu-ne dhewe-dhewe kabeh bocah.*

Book pass-give-Appl mother-Poss self all child

‘Books were given to their own mothers by each child’

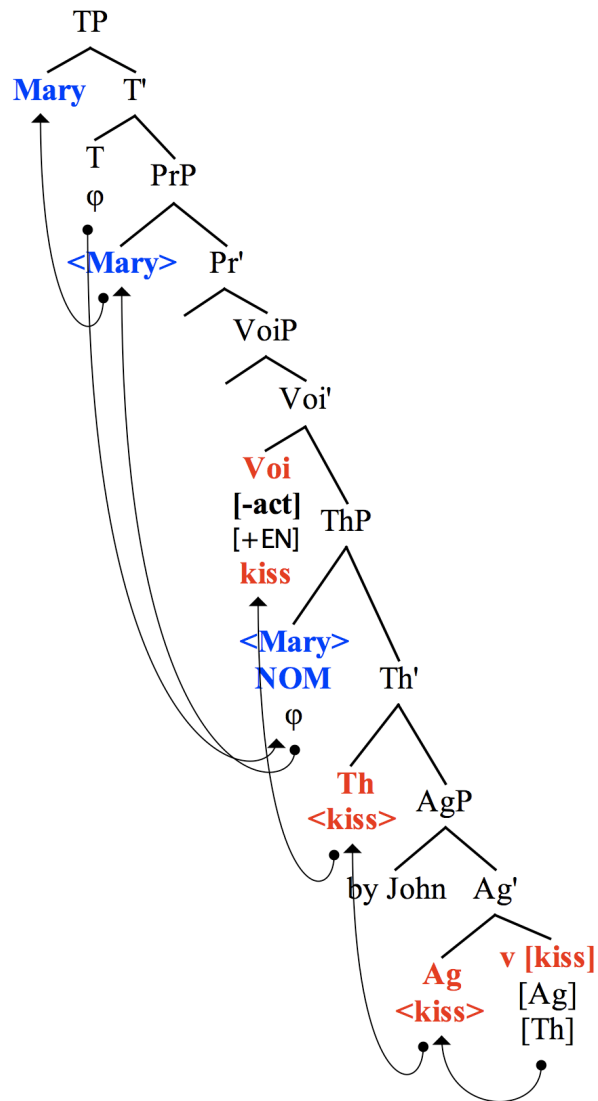
In (172a), the antecedent *kabeh bocah* ‘all child’ bounds the anaphor *ibune dhewe-dhewe* ‘their own mothers’ but not vice versa as seen in (172b). This shows that the applied argument c-commands the PP agent but not vice versa.

Now I discuss how the agents are merged in the derivation. I start first the representation of passive based on Bowers’ (2010) framework. As is known from chapter 5, the by-phrase in Bowers’ (2010) framework originates low in the derivation at the Spec of Agent Phrase. The Agent head is merged at the bottom of the derivation below the argument heads. The agent has a sister in the form of a root verb. The root verb has an a-selection of specific arguments based on its valence and undergoes successive cyclic movement to each of the argument heads.

On the other hand, the Voice head carries the feature of [-act] which results in the following consequences: (i) the head selects the morpheme -EN, (ii) the accusative probe in the head is inactive, and (iii) the theme argument or the applied in a double

construction should be raised to T to receive a nominative case.

(173) Mary was kissed by John



Now I adjust the derivation with a higher position for the Voice head and addition of a Transitive head. The representation relies on the following mechanism:

(i) The T head has a probe for Nominative case which looks for an argument with an

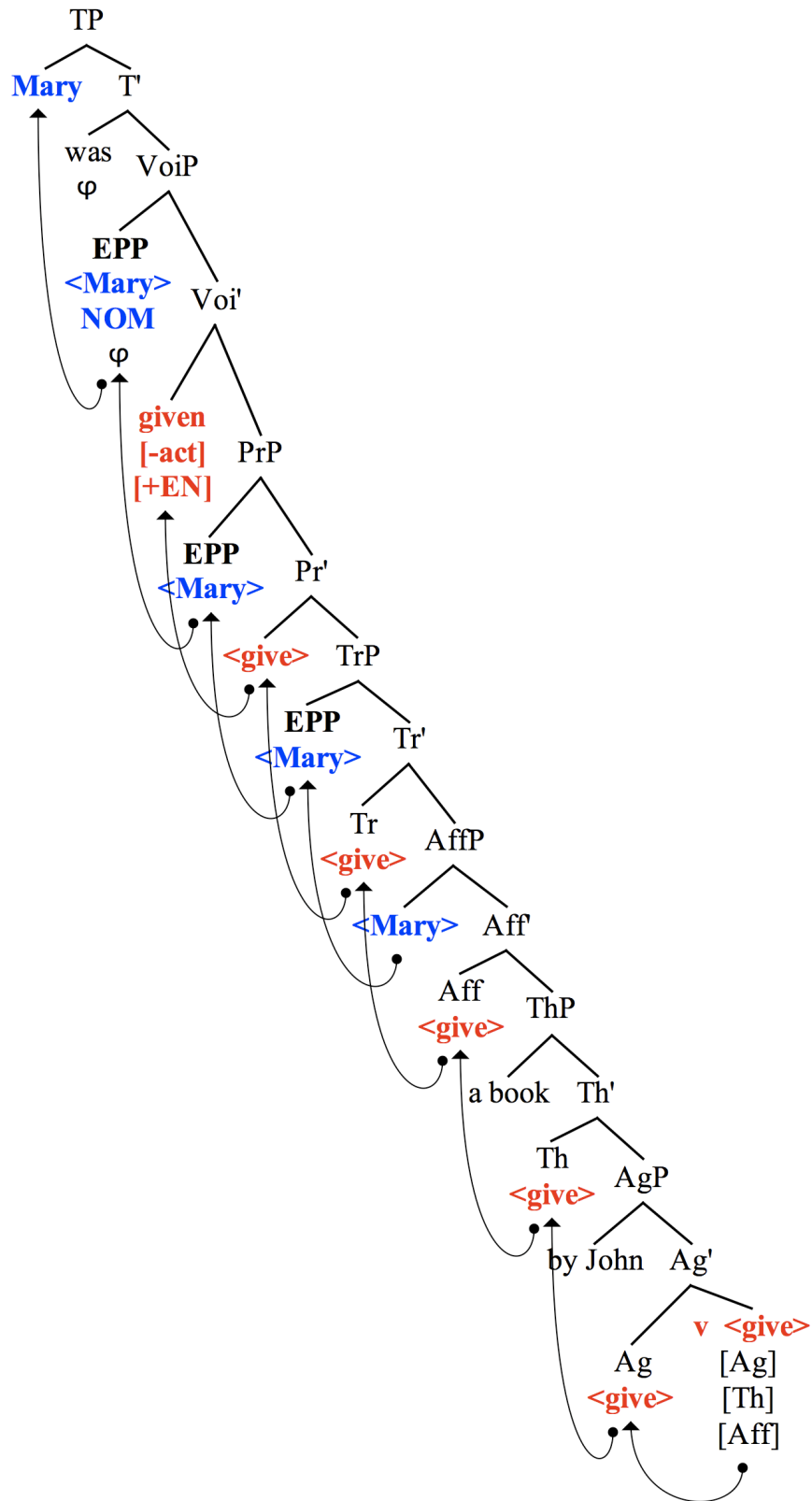
unvalued case feature.

(ii) The Tr Head has a probe for Accusative case. However, since the construction is [-act], the probe is inactive.

(iii) The Pr head and the Tr head have a pure EPP feature

(iv) The theme or the applied argument is raised by the pure EPP features to the Spec of Tr, and then Spec of Pr before being valued with Nominative case by the probe at the T head, and moved to Spec, T.

(174) Mary was given a book by John.



In (174), the by-phrase *by John* is merged down below at the Agent head. On the other hand, the applied argument *Mary* is merged at the Affectee head. The argument *Mary* is then attracted by the pure EPP features of the Tr, Pr, and Voice heads and raised consecutively to the three heads. At the Voice head, the probe at T values the argument with a Nominative case and raised it to Spec, T.

It can be observed that the representation of passive in (174) is still insufficient to explain the Javanese passive with its three different agents. It immediately poses question on how the agent at the Agent head raises to the Tr head and the Voice head as described by my earlier proposal. I posit that the answer can be explained by the ergative framework of Legate (2010) discussed earlier in 6.5. Hence the derivation has to include an ergative feature which motivates the agent to be raised to the Pr head for the postverbal bare nominal agent and then to the Voice head for the preverbal bound pronoun agent.

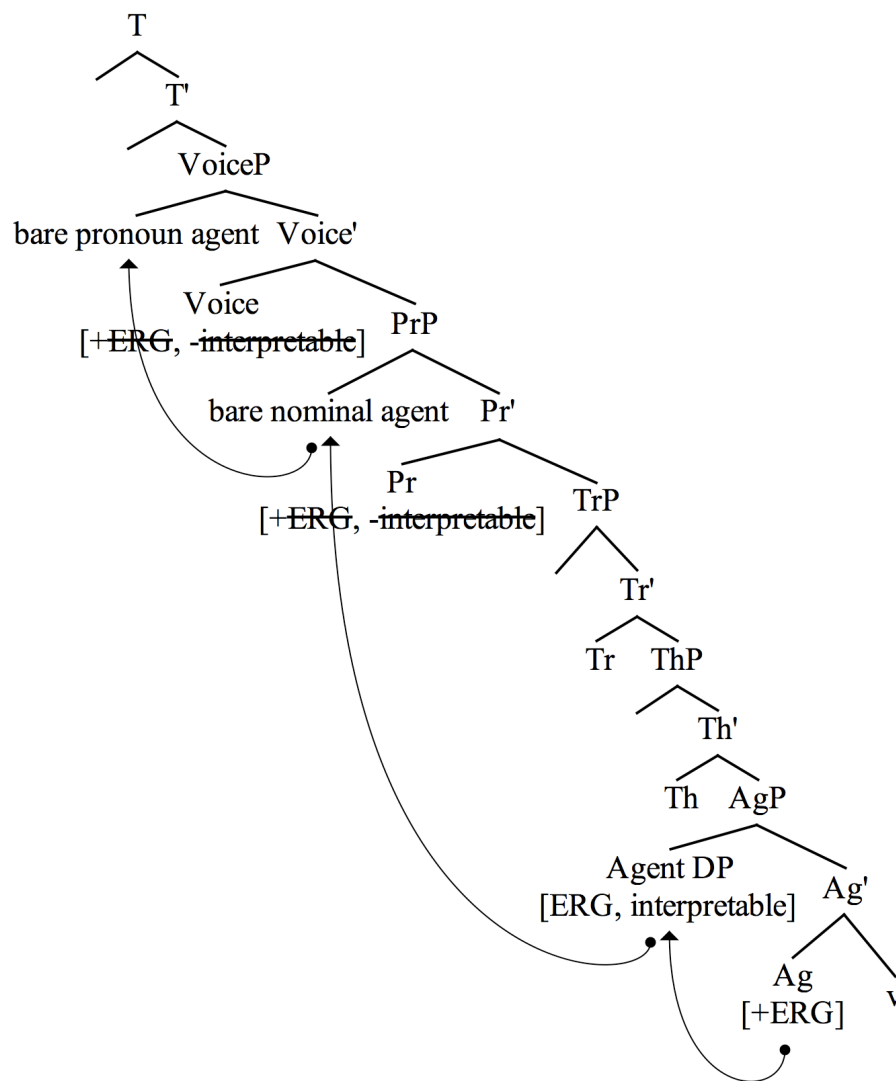
This is done by first equipping the Agent head with an inherent ergative case. Hence when an argument with an unvalued case feature is merged at the Spec of Ag, the argument will get an inherent ergative feature from the head. After the case-assignment, the Agent DP now has an interpretable ergative feature. Since inherent case cannot be deleted, the feature ergative stays with the Agent DP.

Next, the ergative feature should be present at the three heads that host the three types of Javanese passive agents: (i) the agent head, (ii) the Pr head, and (iii) the Voice head. The feature [+ERG] is only present when the heads have the feature of [-act]. Hence, it can be assumed that the feature of [-act] and [+ERG] spreads from the

Voice head through the rest of the extended projection.

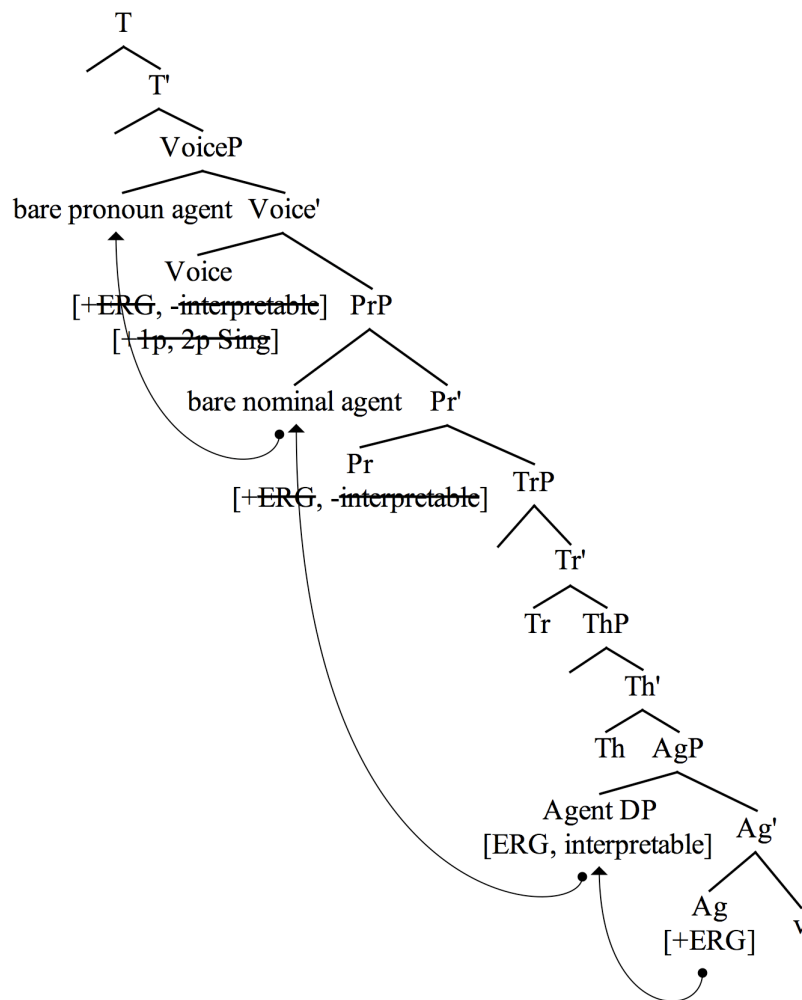
How does the agent move to the Pr head and the Voice head? I argue that the Pr head and the Voice head have uninterpretable ergative features that can be satisfied by raising the agent DP to the two respective heads. After the features are checked, they can be deleted from the heads.

(175) The checking of the ergative feature



The derivation in (175) has successfully explained why the Agent should move to the Spec of Pr and the Spec of Voi. However, it cannot explain why only the first and singular agent can appear at the Spec of Voi. To solve this problem, we need a person feature at the Voi head, the [+1p, 2p sing] feature. Hence, if the agent is the first or second person singular, it should be raised to the Spec of Voi. If the agent is of another type of person, it stops at the Spec of Pr.

(176) The checking of the person feature



To conclude, the derivation of the Javanese PP agent is similar to the derivation of the passive construction in Bowers' (2010) framework. However, to account for the bare agents at the SpecPr and SpecVoi, the new framework introduces an inherent ergative case marker at the Ag head. When the case is assigned, the agent DP has interpretable ergative feature. On the other hand, the Pr head and the Voi head have uninterpretable ergative features that must be satisfied by adjoining the agent to the Spec of the heads. Moreover, to explain for the restriction that the bare pronoun agent should be a first or a second person singular, the Voi head has an interpretable feature of [+1p, 2p sing] that has to be satisfied by adjoining a first or second person singular agent to the Spec, Voi.

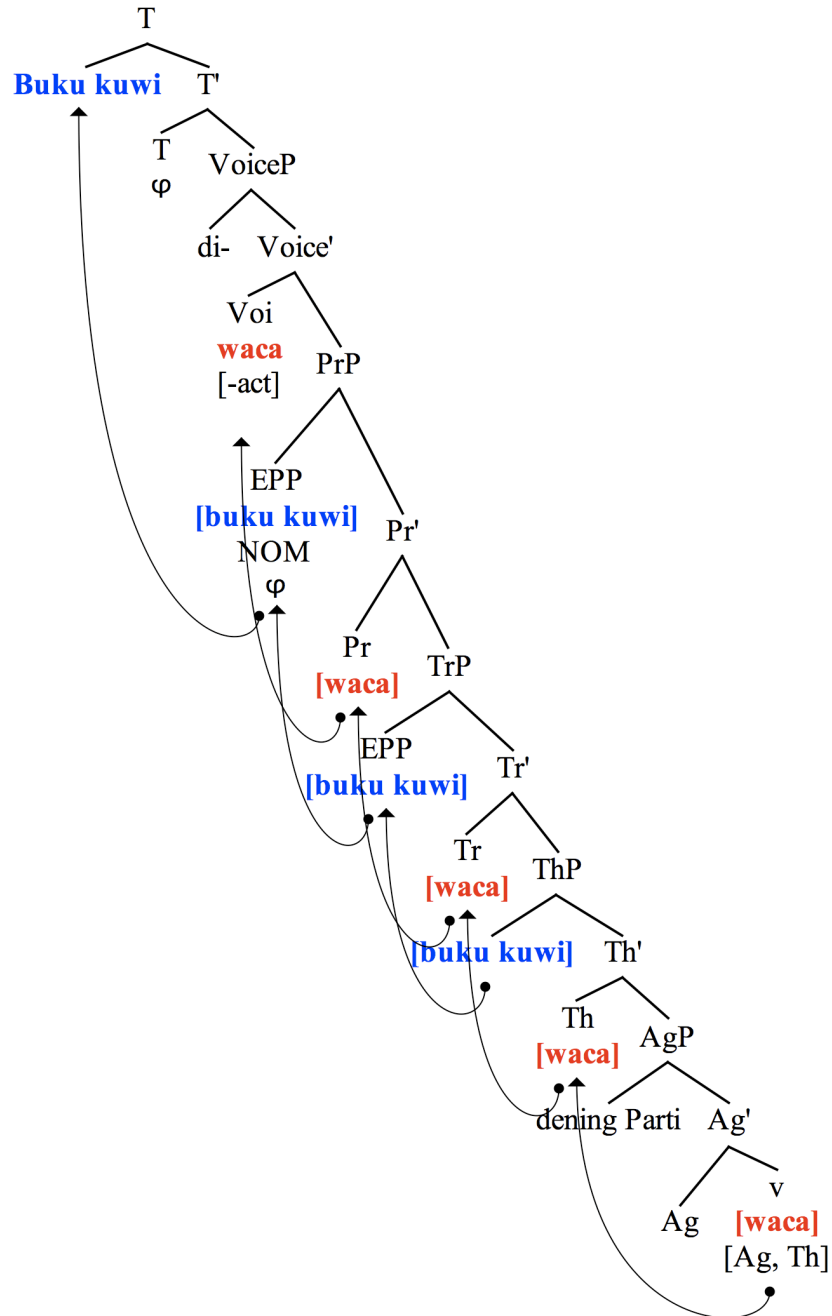
I now illustrate the new framework with examples. First, the representation of the PP agent is similar to that of the English passive.

(177) The representation of the PP agent

Buku kuwi diwaca dening Parti.

Book that pass-read by Parti

'The book was read by Parti'



In (177), similar to English, the theme argument *buku kuwi* ‘that book’ is raised by the pure EPP feature at the Tr head to the Spec of Tr then consecutively raised to the Spec of Pr by the EPP feature at the Pr head. The argument is then raised to the Spec of Voi

by the EPP feature at the Voi head. Next, the probe at the T head looks down to the Spec of Voi and values the argument with a nominative case before moving it to the Spec of T. On the other hand, the PP agent stays in situ at the Spec of Agent head.

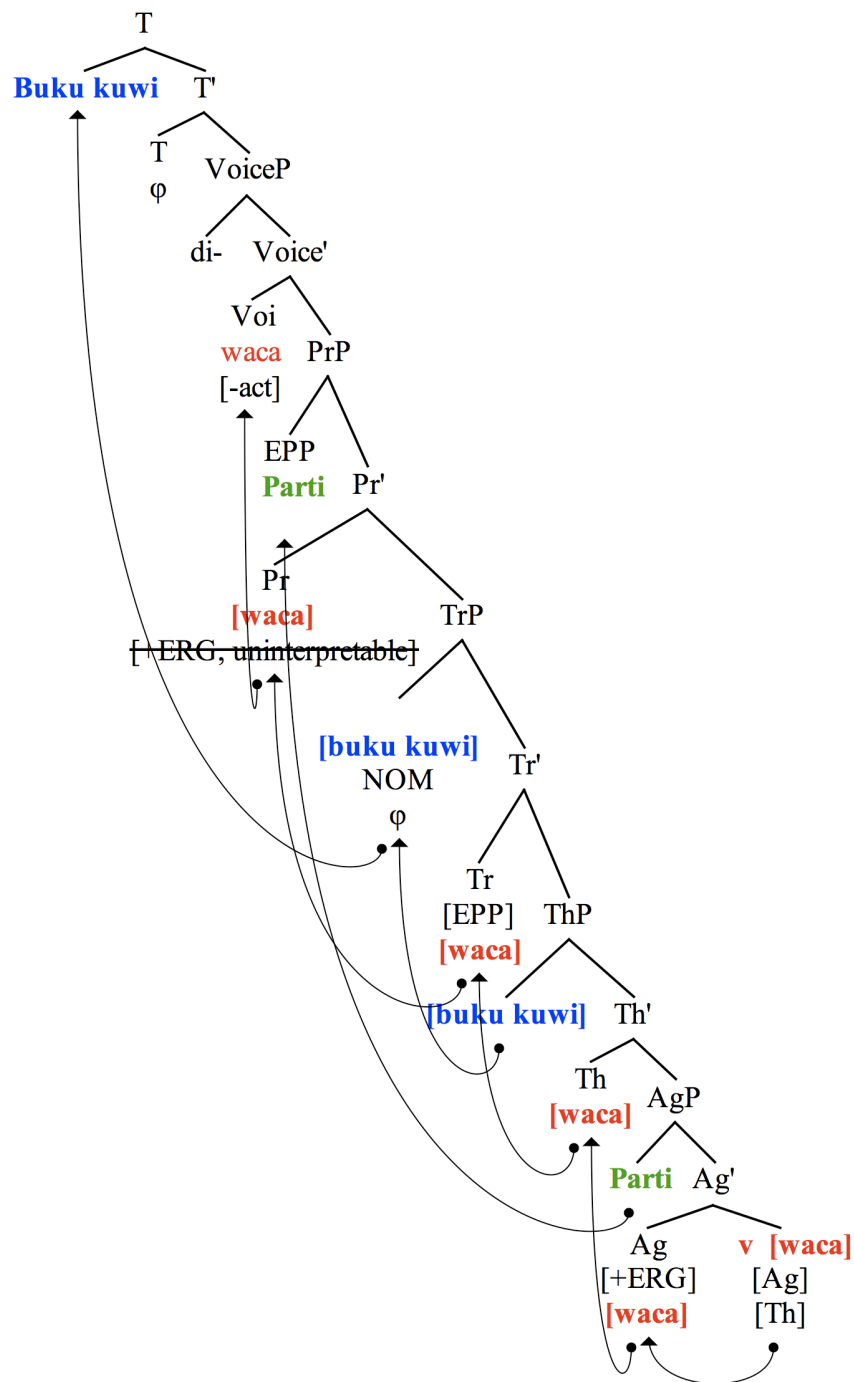
Next, I illustrate the representation of the postverbal bare nominal agent.

(178) The representation of the postverbal bare nominal agent

Buku kuwi di-waca Parti

Book that pass-read Parti

‘The book was read by Parti’

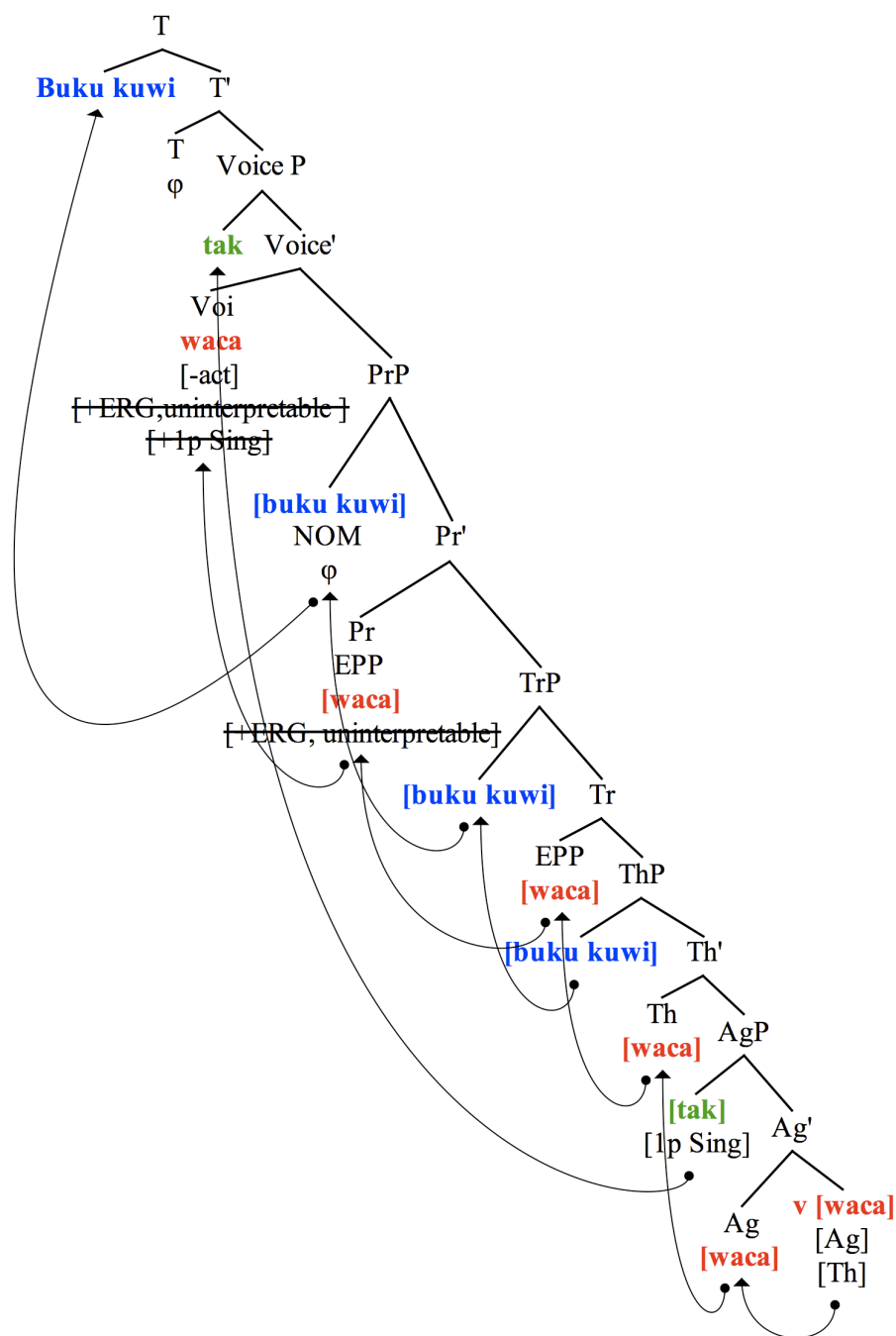


In (178), an argument with an unvalued case feature, *Parti*, is merged at the Spec Ag. Therefore, the argument has to be valued with an inherent ergative case at the Agent

head. The DP *Parti* then has an interpretable ergative feature. On the other hand, the Pr head has an uninterpretable ergative feature. To delete this feature, the DP *Parti* has to be raised at the Spec of Pr head. The checking feature at the Pr head does not attract the theme argument since the theme does not have a compatible ergative feature. On the other hand, the theme DP *buku kuwi* moves to Spec, Tr by the EPP feature at the Tr head. However, it cannot move to the Spec, Pr since the position is already occupied by the agent DP *Parti*. Hence, the theme stops at the Spec of Pr where it is valued a Nominative case by the probe at the head and then raised to the Spec of T.

Next, I show the representation of the bare pronoun agent.

(179) The representation of the preverbal bare pronoun agent



In (179), the bare pronoun agent *tak* has the feature of [+1 p Sing]. The bare pronoun should be raised to the Spec of Voice to check the same feature at the Voice head. On

the other hand, the theme DP *buku kuwi* ‘that book’ is raised to consecutively to the Spec of Tr and Spec of Pr due to the EPP features at the Tr and Pr heads.

6.7 Conclusion

Javanese Passive is unique in that its agent can be located at three different positions with different forms. Regular passive agents with the prefix *di-* can be a postverbal bare nominal or in a prepositional phrase at the end of the sentence. On the other hand, the agent of the bare passive is preverbal and is expressed with bound pronouns *tak* and *kok* for the first and second person singular. Moreover, the agents display different behaviors. The PP agent behaves like an adjunct, while the bare agents behave like VP arguments. In addition, the bare pronoun agent shows traits of a subject of an active clause.

In this chapter, I answer questions related to: (i) the identity of the bound pronouns *tak* and *kok*, (ii) the explanation for the VP argument traits of the bare agents, (iii) the explanation for the subject trait of the bare pronoun agent, and (iv) a new representation of passive which includes the three agents of the Javanese passive.

First, the bare pronouns are clitics and not prefixes because they do not show the behavior of a verbal prefix in Javanese in triggering morpho-phonological alternation. Moreover, they cannot co-occur with other forms of agent in the same clause.

Second, the bare agents display two VP argument behaviors: (i) A-bar movement restriction, and (ii) adverb insertion restriction between the verb and the agent. A-bar movement restriction for the bare pronoun agent is due to the nature of

the bound clitics, whereas for the bare nominal agent, it is due to the verbal prefix preventing the movement. On the other hand, the adverb insertion restriction is caused by the adjacency of the verbal clitic and the verb, and a restriction that a VP modifying adverb should not appear between the verb and the postverbal argument.

The subject trait of the bare pronoun agent is caused by the remnant of previous ergative syntax in Javanese. Since the agent was marked as ergative in the previous ergative syntax, it still displays ergative traits with its ability to bind a reflexive.

I close the discussion with a new representation of Javanese passive based on Merchant (2013) and Bowers (2010). The Voice head is merged high in the derivation below T on Merchant's framework (2013). Furthermore, following Bowers (2010), the PP agent is located low in the derivation at the Ag head, and consequently the bare pronoun agent is at the Spec of Voice head, while the bare nominal agent is at the Spec of the Pr head.

The movements of the agent to Pr and Voi are explained by the features of [-act], [+ERGATIVE], and [PERSON] at the Ag head, Pr head and Voi head. When an unvalued argument merged at the Spec of Ag, the agent receives an inherent ergative head from the Agent head. The DP then has to be raised to the Spec of Pr and the Spec of Voi to check the uninterpretable ergative features at the Pr head and Voi head. On the other hand, when an agent carrying the feature of [1, 2 p Sing] is merged at the Agent head, the agent should be raised to the Spec of Voi to check a similar person feature at the Voi head.

CHAPTER SEVEN

JAVANESE ADVERSATIVE PASSIVE

7.1 Introduction

In this chapter, I discuss the Javanese adversative passive. Before analyzing it in detail, I give a brief review of the construction providing (i) general definition of adversative construction, (ii) an indication of the range of devices used to express adversity and (iii) description of the various types of adversative passive. A malefactive or adversative is broadly defined as a linguistic coding of an event that is detrimental to somebody or a situation that is bad or hurtful to somebody (Kittila, 2010: 203). Languages use a variety of different strategies to express adversity: (i) case, (ii) serial verb construction, (iii) adposition, and (iv) applicative affix (Kittila and Zuniga, 2010: 7-10), and (v) adversative passive.

(180) Expression of adversity

a. Lezgian dative case

Čna aq̃eḡwerag suna-di-z wūc-na q'wan?

We.ERG that poor Suna-OBL-DAT do.what-AOR PTL

‘What did we do to that poor Suna?’

(Haspelmath 1993: 88)

b. Fulamalefactive marker GIVE

O ngma la zirii ko Amai oi yideme yele

He cut a.m. lies GIVE Ama she housepeople matter

‘He lied to Ama about her family’

(Fagerli, 2001: 214)

c. Finnish adposition

Men-i-n kaupunki-inhäne-n harmikse-en

go-PST-1Sg town-ILL 3sg-GEN to.the.detriment-3.PSR

‘I went to town to his/ her detriment’

(Kittila and Zuniga, 2010:8).

d. Applicative in Kunuz Nubian

Ay-gi ir:-g nodd-de:s-s-a

1sg-ACC rope:ACC cut-BEN-PST-3PL

‘They cut the rope (to my detriment)’

(Kittila and Zuniga, 2010:6).

e. Japanese adversative passive marker for verb

Kinoo ame-ni hur-are-ta

yesterday rain-DAT fall-PASS-PST

‘[We] got rained on yesterday’

(Radetzky and Smith, 2010: 114)

Next, I discuss the adversative passive which will be the focus of attention here.

Adversative passive is a passive sentence in which the subject is adversely affected by the action described by the verb (Prasithrathsint, 2006). The adversative passive is different from the regular passive in the following respects:

- (i) The subject of the adversative passive is normally animate, whereas the subject of regular passive can be other animate or inanimate.

(ii) The adversative passive has an adversative context, which signifies that the speaker perceives the event as unpleasant or unfortunate.

(Prasithrathsint, 2006: 118)

(iii) It differs from the standard passive in being a valence increasing construction rather than valence decreasing construction (Tsuboi, 2010).

It has also been claimed in the literature that there are at least distinct two types of adversative passive. The first type expresses the idea that the event denoted by the verb affects the passive subject adversely in a direct or indirect fashion.

(181) Japanese adversative passive

a. *Kinoo ame-ni hur-are-ta*
yesterday rain-DAT fall-PASS-PST

‘[We] got rained on yesterday’

(Radetzky and Smith, 2010: 114)

b. *Taro-wa Hanako-ni piano-o hik-are-ta*
Taro-TOP Hanako-DAT piano-ACC play-PASS-PST

‘Lit. Taro was played piano by Hanako’

‘Taro was adversely affected by Hanako playing piano’

(Tsuboi, 2010: 420)

The second type is similar but is said to add the information that the affected subject has a possessive relation with the theme argument.

(182) Kinyarwanda

a. *Ingurube z-a-ri-iye ibíryo by’ábaana.*
pigs they-PST-eat-ASP food of children

‘The pigs ate the children’s food’

- b. *Abáana ba-a-ri-ir-iw-e ibíryo n’ingurube.*

Children they-PST-eat-APP-PASS-ASP food by pigs

‘The children were eaten (their) food by pigs’

(Davies and Dubinsky, 2004: 133-134)

In the framework of Relational Grammar, the possessor *abáana* ‘children’ raises out of the NP to be the subject of the passive (Davies and Dubinsky, 2004: 134).

Now I turn to Javanese. Javanese adversative passive is derived with prefix *ke-* or circumfix *ke-an* added to the base verb. The passive appears to follow the standard typology by being a valence increasing construction. However, in Javanese, I will argue that the semantic property of the construction is not that the subject was adversely affected by the action, but rather certain consequences or an action were not intended by the agent. In addition, the agent of the passive is optional.

(183) Javanese adversative passive

- a. *Aku ke-tendang adhi-ku*

I Adv-kick younger sibling-my

‘I was accidentally kicked by my younger sibling’

- b. *Ani ke-tiba-nan nangka*

Ani Adv-fall-an jackfruit

‘Ani was knocked down by a jackfruit’

As seen in (183a), the subject *aku* ‘I’ was accidentally kicked by *adhiku* ‘my younger sibling’. Though the agent *adhiku* performed the action described by the verb

voluntarily, he did not intend to affect subject *aku*. In contrast, the consequences suffered by the subject in (183b) are unintentional, since the event of falling is accidental in nature and a jackfruit cannot have volition.⁵

In fact, however, Javanese adversative can be neutral in its consequence for the affected subject as seen in (184a) or even pleasant in (184b).

(184) Neutral or pleasant consequence of Javanese adversative passive

a. *Aku mau ke-temu Ani neng pasar*

I just now Adv-meet Ani at market

‘Lit: I was accidentally found by Ani’

‘I accidentally met Ani at the market’

b. *Amir ke-pilih dadi lurah*

Amir Adv-choose become head of district

‘Amir was unexpectedly chosen as the head of the district’

Hence, it is probably more appropriate to term the construction as accidental passive. However, I will continue to use the term adversative passive in this dissertation since it has become a standard term in the literature. It is not clear whether other languages with adversative passive also behave like Javanese in terms of the nature of the consequences suffered by the subject and it is necessary to perform more study on the issue.

I will show in this chapter that the character of Javanese adversative passive is the result of the combination of two things: (i) passive with specific accidental information, and (ii) special applicative *-an*, which is similar to the suffix *-i* but has to

⁵ The surface form of the suffix *-an*, *-nan*, is caused by assimilation to an open-syllabic root.

co-occur with the adversative prefix *ke-*. Simultaneously, I also attempt to answer several problems related to the analysis of the Javanese adversative passive: (i) what is the connection between the adversative passive and the regular passive?, (ii) does possessor raising exist?, and (iii) what factor determines whether a verb can have an adversative passive form?

I start with the first problem. It is commonly assumed that the adversative passive is based on the regular passive. Horne (1961), Poedjosoedarmo, (1986), Davies (1995) claim that the suffix *-an* in Javanese adversative passive is the counterpart of the goal suffix *-i* in the regular passive. Davies (1995) bases his observation on the fact that similar verbs can take both suffixes and that they have parallel word order as seen in (185a, b). Moreover, the adversative passive is not compatible with the locative suffix *-i* as seen in (185c).

(185) Regular passive with suffix *-i*

- a. *Siti di-ciprat-i Bambang banyu panas.*
 Siti pass-splash-Loc Bambang hot water
 ‘Siti was splashed with hot water by Bambang’
- b. *Siti ke-ciprat-an Bambang banyu panas.*
 Siti Adv-splash-Appl Bambang hot water
 ‘Siti was accidentally splashed with hot water by Bambang’
- c. **Siti ke-ciprat-i Bambang banyu panas*
 Siti Adv-splash-Appl Bambang hot water
 ‘Siti was accidentally splashed hot water by Bambang’
 (Davies, 1995: 32)

Note, however, that not all verbs in the regular passive with suffix *-i* can be converted into adversative passive with suffix *-an*.

(186) Verb with *-i* but incompatible with adversative passive

a. *Ani n-dolan-i bayi kuwi*

Ani act-play-Appl baby that

‘Lit: Ani played in front of that baby for the baby’s amusement’

‘Ani entertained the baby’

b. *Bayi kuwi di-dolan-i Ani*

Baby that pass-play-Appl Ani

‘That baby was entertained by Ani’

c. **Bayi kuwi ke-dolan-an Ani*

Baby that pass-play-Appl Ani

‘That baby was accidentally entertained by Ani’

It can be seen in (186) that the verb *dolan* ‘to play’ takes the suffix *-i* but resists the suffix *-an*. It appears that volitionality and unintended consequences for the affected subject play part in the resistance. The verb *dolan* involves a higher degree of volition since it is normally impossible for an agent to play accidentally. Moreover, the action to play described in (186) is intended to affect a subject. Hence, the claim that suffix *-an* is an adversative counterpart of suffix *-i* is problematic. I propose instead that suffix *-an* is an applicative suffix for adversative passive in Javanese. This accords with the idea that the adversative passive increases valence (Tsuboi, 2010).

The second problem is related to the so-called possessor raising construction. Kubo (1992) proposes two types of adversative passive; the first type is a regular

adversative passive with a malefactive-affected argument, while the other is a possessor raising construction. However, possessor raising is troublesome for Japanese as seen in (187).

(187) Possessor raising in Japanese

a. *Ani ke-colong-an tas-e.*

Ani Adv-steal-Appl bag-Poss

‘Ani suffered from her bag being stolen’

b. *Ani ke-colong-an tas.*

Ani Adv-steal-Appl bag

‘Ani suffered from her bag being stolen’

c. *Ani ke-colong-an tas-e Amir*

Ani Adv-steal-Appl bag-Poss Amir

‘Ani suffered because Amir’s bag was stolen while she was holding the bag’

The problem is that in Japanese the theme need not be directly possessed by the passive subject. As seen in (187c), the passive subject *Ani* is not the original owner of the theme argument *tas-e Amir* ‘Amir’s bag’.

Another theory of possessor raising is proposed by Pytkänen (2000). She argues that there are two types of adversative applicative, the high adversative applicative and the low adversative applicative. In the low applicative, the affected argument bears a possession relation while that is not the case for the high applicative.

Unfortunately a clear distinction between high and low adversative cannot be maintained for Japanese because the possession relation between the affected argument and the theme argument is not necessary in Japanese. As seen in (187), the

affected argument can have indirect possessive relation with the theme argument.

I discuss next the factor that determines the ability of a verb to be converted into adversative passive. Davies (1995) claims that this is an instance of split intransitivity because the Javanese adversative passive is restricted to transitive and unaccusative verbs only. This explains the ungrammaticality of (188) with an unergative root verb.

(188) Unergative verb

**Kertas-e Amir ke-playo-nan bocah-bocah*

paper-Poss Amir Adv-run-tr children

‘Amir’s paper got run on by the children’

(Davies 1995: 19)

However, it can be observed that Javanese adversative passive can be compatible with unergative which shows that split intransitivity is not the determinant factor for the construction.

(189) Unergative

Pardi ke-lingguh-an anak-e

Pardi Adv-sit-Appl child-Poss

‘Pardi was affected by his child accidentally sat on him’

In this chapter, I attempt to show that Javanese adversative passive is a combination of applicativization and passivization, and in doing so, I answer the following questions on Javanese adversative passive:

- (i) What is the real function and identity of suffix *-an*?
- (ii) What determines the compatibility of a verb with adversative passive?

(iii) How can we account for the possessor raising?

I close my discussion on Javanese adversative passive by proposing a new approach to represent the construction.

7.2 The Function of Suffix *-an*

In this section, I investigate the function of suffix *-an*. In doing so, I argue against Davies (1995) that the suffix *-an* is an adversative counterpart of the suffix *-i* in the regular passive.

A comprehensive discussion of suffix *-an* should include the discussion of the function of suffix *ke-*. Therefore, I start my discussion with a brief historical review of the prefix. Old Javanese has two passive affixes, the infix *-in-* and the prefix *ka-*. The infix *-in-* emphasizes the action described by the verb, while the prefix *ka-* focuses on the result of the action (Zoetmulder and Poedjawijatna, 1961: 78). To be precise, the prefix *ka-* denotes involuntary or accidental actions, or resultative aspect (Oglobin, 2005: 617).

(190) Suffix *ka-* in Old Javanese

Yan hana ka-teka-n danda de sang prabhu

If exist Adv-arrive-tr punishment by det king

‘If there is one who was given punishment by the king’

(Zoetmulder and Poedjawijatna, 1961: 81)

In Modern Javanese, the prefix *ke-* serves as an accidental passive prefix (Uhlenbeck, 1978: 171), denoting an involuntary transition into a state or the resultative state caused by the transition, or the state of being affected by an action

described by the verb (Oglobin, 2005: 612), and has the semantic value of ‘the event or condition is either unexpected, unintentional, unavoidable and the effect is adversative’ (Dardjowidjojo 1978, Uhlenbeck 1978, Subroto 1998).

Now I return to the function of suffix *-an*. We have seen that suffix *ke-* conveys the accidental semantic of the Javanese adversative passive and the intuition is that the suffix *-an* adds another component meaning to the passive. Davies (1995) claims that the suffix *-an* in Javanese adversative passive is parallel to the locative suffix *-i* in the active clause based on his observation: (i) similar verbs can be attached to both suffixes, (ii) they have parallel word order as seen in (185a, b), (iii) adversative passive is not compatible with the locative suffix *-i* as seen in (185c).

However, there is a weakness in Davies’ (1995) claim. If suffix *-an* is the adversative passive variant of suffix *-i*, then all verbs with suffix *-i* should be able to convert into adversative passive with *-an*. However, this is not the case. Certain unergative verbs can be attached to *-i* but not to *-an* as seen in Table 12.

Unergative	Suffixation with <i>-i</i>	Adversative Passive
<i>Ati dolan</i> Ati play ‘Ati played’	<i>Ati n-dolan-i anak-e</i> Ati act-play-loc child-Poss ‘Ati played in front of her child to entertain the child’	* <i>Ati ke-dolan-an Ani.</i> Ati Adv-play-Appl Ani ‘Ati suffered from Ani accidentally played in front of her’
<i>Ati njoged</i> Ati act-dance ‘Ati danced’	<i>Ati n-joged-i anak-e</i> Ati act-dance-loc child-Poss ‘Ati danced in front of her child - to entertain her-’.	* <i>Anak kuwi ke-joged-an Ati</i> Child that Adv-dance-Appl Ati ‘The child suffered because Ati accidentally danced in front of her’

<i>Ati n-donga</i> Ati act-pray 'Ati prayed'	<i>Ati n-donga-ni Marni</i> Ati act-pray-loc Marni 'Ati prayed for Marni'	<i>*Marni ke-donga-nan Ati</i> Marni Adv-pray-Appl Ati 'Marni suffered because Ati accidentally prayed in front of her'
<i>Adi mlayu</i> Adi run 'Adi ran'	<i>Adi mlayu-ni Marni</i> Adi run-loc Marni 'Adi ran toward Marni'	<i>*Marni ke-playu-an Adi</i> Marni Adv-run-Appl Adi 'Marni was accidentally run on by Adi'

Table 12. Applicative with *-i*, no adversative form

Hence, although the suffix *-an* has a similar function with suffix *-i*, they are clearly not identical.

I propose instead that suffix *-an* is an applicative suffix in line with Tsuboi (2010) and Pylkkänen (2000). As evidence, the suffix is obligatory for intransitive verbs in (192) but not for transitive verbs in (191). This proves that the suffix adds valence to the verb, as an applicative morpheme should do.

(191) Transitive verb base: no suffix *-an*

a. *Pardi ke-pidak kanca-ne*

Pardi Adv-step on friend-Poss

'Pardi was accidentally stepped on by his friend'

b. *Pardi ke-thuthuk kanca-ne*

Pardi Adv-hit friend-Poss

'Pardi was accidentally hit by his friend'

(192) Intransitive Verb Base: Suffix *-an*

Unergative

- a. *Tanduran-e Pardi k-uyuh-an asu kuwi*

Plant-poss Pardi act-urinate-Appl dog that

‘Pardi’s plant was urinated on by the dog’

- b. **Tanduran-e Pardi k-uyuh asu kuwi*

Plant-poss Pardi act-urinate dog that

‘Pardi’s plant was urinated on by the dog’

Unaccusative

- c. *Pardi ke-ambruk-an empring*

Pardi Adv-fall-Appl bamboo

‘Pardi was knocked down by a bamboo’

- d. **Pardi ke-ambruk empring*

Pardi Adv-fall bamboo

‘Pardi was knocked down by a bamboo’

7.3 What determines the compatibility of a verb with an adversative?

Davies (1995) claims that adversative passive is impossible for unergative verbs, suggesting that this is an instance of split intransitivity.

I now examine Davies’ (1995) arguments in support of his claim that split intransitivity is involved in Javanese adversative passive. Davies (1995) bases his argument on the different syntactic treatments of unergative and unaccusative verbs in (i) Javanese periphrastic causative, and (ii) topicalized possessor construction. In the

periphrastic causative construction, a clause is embedded under a verb of causation such as *marahi* ‘make’, *ngongkon* ‘order’, *nggawe* ‘make’. Davies (1995) claims that in periphrastic causatives, the embedded subject and verb can invert iff the predicate is unergative.

(193) Javanese periphrastic causative

- a. *Aku sing m-arahi bayi-ne n-angis*
 I Rel act-make baby-DEF active-cry.
 ‘I am the one who made the baby cry’
- b. *Aku sing marahi nangis bayi-ne*
 I Rel act-make act-cry baby-DEF
 ‘I am the one who made the baby cry’

It can be observed that in the ordinary periphrastic construction in (194a), the unergative verb *tangis* ‘cry’ precedes the embedded subject *bayi* ‘baby’. In (194b), the embedded subject and the verb invert, and the verb now precedes the subject.

However, inversion of the embedded subject and verb is prohibited for unaccusative verb (Davies, 1995).

(194) Periphrastic causative and unaccusative verb

- a. *Bocah kuwi m-arahi bapak-ne tiba*
 Child that act-make father-his fall.
 ‘The child made his father fall’
- b. **Bocah kuwi m-arahi tiba bapak-ne*
 Child that act-make fall father-his
 ‘The child made his father fall’

In (194b), the verb cannot precede the embedded subject and Davies (1995) argues that this ungrammaticality indicates the split intransitivity of unergative and unaccusative in Javanese. However, based on my intuition as a native speaker, example (194b) is totally grammatical. I performed similar test on the unaccusative verbs *cuwil* ‘chip’ and *ilang* ‘disappear’ and the embedded subject and verb in the construction can invert for them as well.

(195) Periphrastic causative and unaccusative verbs

- a. *Bocah kuwi marahi cuwil piring-e.*

Child that cause chip plate-his

‘That child caused the plate to chip’

- b. *Bocah kuwi marahi piring-e cuwil.*

Child that cause plate-the chip

‘That child caused the plate to chip’

(196) Periphrastic causative and unaccusative verbs

- a. *Bocah kuwi marahi duitku ilang.*

Child that cause money-his loss

‘That child caused me to loss my money’

- b. *Bocah kuwi marahi ilang duit-ku.*

Child that cause loss money-my

‘That child caused me to loss my money’

As can be seen in the examples above, apparently the order of the embedded subject can be inverted, even if the verbs are unaccusative.

The second syntactic environment is when the possessor is topicalized and the possessed NP extraposed. The third person in Javanese is indicated by affixing the definite suffix *-e* or *-ne* followed by possessor NP. According to Davies (1995), this topicalization is possible for unaccusatives but impossible for unergatives.

(197) Topicalized Possessor

- a. *Ibu-ne Amir teka*
 mother-his Amir come
 ‘Amir’s mother arrived’
- b. **Amir// teka ibu-ne*
 Amir come mother-DEF
 ‘Amir’s mother arrived’

(198) Topicalized Possessor

- a. *Anak-e Siti mlayu*
 Child-DEF Siti run
 ‘Siti’s child ran’
- b. **Siti// mlayu anak-e*
 Siti run child-DEF
 ‘Siti’s child ran’

Based on Davies (1995), examples (197b-198b) are ungrammatical. However, my intuition is that the examples are totally grammatical as is the case for other examples:

(199) Topicalized Possessor

- a. *Anak-e Bambang turu*
 child-his Bambang sleep

‘Bambang’s child slept’

b. Bambang// turu anak-e

Bambang sleep child-his

‘Bambang child’s slept’

To conclude, Davies’s (1995) claim of split intransitivity in Javanese prove to be incorrect. I propose instead that two factors determine whether an intransitive verb can be made into adversative passive: (i) whether or not the verb can be applicativized with suffix *-i*, (ii) the degree of the volitionality of the verb and the potential to cause unintentional consequences for the affected subject. Hence, if an intransitive can have a transitive form with suffix *-i*, has a low degree of volitionality or potential to cause unintentional consequences, then it can have an adversative passive.

I now provide evidence for my claim by applying these tests to unergative verbs. I target unergative verbs because applicativization with suffix *-i* is possible for all unaccusative verbs. Moreover, Davies (1995) uses unergative to support his argument on split intransitivity on Javanese adversative passive. The applicative test includes the following steps:

- (i) applicativizing unergative verbs by using suffix *-i*
- (ii) applying adversative passive to the same verbs
- (iii) verifying whether the results are grammatical

I hypothesize that intransitive verbs that can undergo applicativization in the active and passive clause can also undergo adversative passive. I first applicativize unergative verbs with suffix *-i*. The test results in three different groups of unergative verbs. The first group does not have any transitive or any adversative passive form.

Unergative	Transitive with <i>-i</i>	Adversative Passive
<i>Aku m-brangkang</i> I act-crawl 'I crawled'	* <i>Aku m-brangkang-i kalen</i> I ac-crawl-loc ditch 'I crawled over the ditch'	* <i>Aku ke-brangkang-an Ati</i> I Adv-crawl-Appl Ati 'I was accidentally crawled on by Ati'
<i>Aku kerngan</i> I fight 'I had a fight'	* <i>Aku ng-erngan-i Ati</i> I act-fight-loc Ati 'I fought with Ati'	* <i>Aku ke-kerngan-an Ati</i> I Adv-fight-Appl Ati 'I was accidentally fought on by Ati'
<i>Aku ng-langi</i> I act-swim 'I swam'	* <i>Aku ng-lange-ni kali</i> I act-swim-loc river 'I swam in the river'	* <i>Aku ke-nglangen-an Ati</i> I Adv-swim-Appl Ati 'I was accidentally swam on'
<i>Aku ng-adeq</i> I act-stand 'I stood'	* <i>Aku ng-adeq-i lawang</i> I act-stand-loc door 'I stood at the door'	* <i>Aku ke-adeq-an Ati</i> I Adv-stand-Appl Ati 'I was accidentally stood on by Ati'

Table 13. Unergative Group One: no transitive form and no adversative form

It can be observed that the unergative verbs, *crawl*, *fight*, *swim*, and *stand* cannot be transitivized with suffix *-i*. We can see that the lack of transitivity also extends to adversative passive. None of the verbs have an adversative form with *ke*-or *ke-an*. The first group of unergative verbs appears to be 'true' intransitive, which resist any transitivization.

As evidence, I performed a forced adversative context to some of the verbs. The test indicates that the verbs cannot be converted into adversative passive.

(200) Test of forced adversative passive

a. **Aku ke-brangkang-an Ati*

I Adv-crawl-Appl Ati

‘It was dark and Ati accidentally crawled on me’

b. **Aku ke-nglange-nan Ati*

I Adv-swim-Appl Ati

‘Ati swam nearby and I was accidentally knocked by her’

It can be observed that the verbs *crawl* and *swim* cannot have an adversative meaning.

Both verbs require intended goal. Hence a person has to *swim* or *crawl* to a designated goal and therefore the action has to be intentional. Moreover, we need to use other verbs to create unintentional reading. As an example, the unintentional counterpart of *nglangi* ‘to swim’ is *keli* ‘to be carried away by the stream’.

The second group can be made into transitive by means of suffix *-i* but does not have adversative passive forms.

Unergative	Transitive with <i>-i</i>	Adversative Passive
<i>Ati dolan</i> Ati play ‘Ati played’	<i>Ati n-dolan-i anak-e</i> Ati act-play-loc child-Poss ‘Ati played in front of her child to entertain the child’	* <i>Ati ke-dolan-an Ani.</i> Ati act-play-Appl Ani ‘Ati suffered from Ani accidentally played in front of her’
<i>Ati njoged</i> Ati act-dance ‘Ati danced’	<i>Ati n-joged-i anak-e</i> Ati act-dance-loc child-Poss ‘Ati danced in front of her child -to entertain her-’.	* <i>Anak kuwi ke-joged-an Ati</i> Child that Adv-dance-Appl Ati ‘The child suffered because Ati accidentally danced in front of her’
<i>Ati n-donga</i> Ati act-pray ‘Ati prayed’	<i>Ati n-donga-ni Marni</i> Ati act-pray-loc Marni ‘Ati prayed for -the late- Marni’	* <i>Marni ke-donga-nan Ati</i> Marni Adv-pray-Appl Ati ‘Marni suffered because Ati accidentally prayed in front of her’

<i>Adi mlayu</i> Adi run 'Adi ran'	<i>Adi mlayu-ni Marni</i> Adi run-loc Marni 'Adi ran toward Marni'	<i>*Marni ke-playu-an Adi</i> Marni Adv-run-loc Adi 'Marni was accidentally run on by Adi'
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Table 14. Unergative Group Two: Transitive with -i, no adversative form

As can be seen in the examples above, although the unergative verbs have transitive forms by means of suffix *-i* for *play*, *dance* and *run* or *-ake* for *pray*, they do not have adversative passive forms. Adversative passive involves the lack of volition of the agents to perform the action described by the verbs and to affect the affected arguments. The verbs of this class have high degree of volition, meaning that an agent cannot normally perform actions they refer to without involving his volition. For instance, it is impossible that an agent dances accidentally or run accidentally. Therefore, adversative passive is prohibited for those verbs.

As evidence, I performed a test in which I used the verbs with suffix *-an* in forced adversative situation.

(201) Forced adversative situation

- a. **Ati ke-dolan-an Ani*

 Ati Adv-play-Appl Ani

 'Ani was playing and affected Ati who was nearby'
- b. **Marni ke-playu-an Adi*

 Marni Adv-run-Appl Adi

 'Adi was running and affected Marni who was nearby'

It is evident from the test that the verb *dolan* 'play' and *playu* 'run' cannot be converted into adversative passive.

In the third group of Javanese unergative, both transitive and adversative forms are allowed.

Unergative	Transitive with -i	Adversative Passive
<i>Parto idu neng lemah</i> Parto spit on ground 'Parto spat on the ground'	<i>Parto ng-ido-ni musuh-e</i> Parto act-spit-loc enemy-Poss 'Parto spat on his enemy'	<i>Adi k-idon-an Parto</i> Adi Adv-spit-Appl Parto 'Adi was accidentally spat on by Parto'
<i>Parto mundur</i> Parto step backward 'Parto stepped backward'	<i>Parto ng-undur-i Adi</i> Parto act-stepb.ward-loc Adi 'Parto stepped backward from Adi'	<i>Adi k-undur-an Parto</i> Adi Adv-step b.ward-Appl Parto 'Adi suffered because Parto stepped backward and accidentally knocked him'
<i>Parto lingguh</i> Parto sit 'Parto sat'	<i>Parto ng-lingguh-i kursi</i> Parto act-sit-loc chair 'Parto sat on a chair'	<i>Kursi-ne ke-lingguh-an Parto</i> Chair-Def Adv-sit-Appl Parto 'The chair was accidentally sat on by Parto'

Table 15. Unergative group three: transitive with -i, adversative form

It can be observed that the unergative verbs of group three can have transitive form with suffix -i. As a consequence, the verbs can also be made into adversative passive. It can also be seen that the verbs have high degree of volition or possibilities to cause unintended consequences for the affected subject. The agent of the verb *idu* 'spit' might have done the action volitionally, but it is highly possible for the action to accidentally affect an affectee who happened to be at the vicinity of the agent. This is also the case with the verb *undur* 'to step backward' and *lingguh* 'to sit'. The actions described by the verbs might be done either volitionally or non-volitionally, but they have potential to cause unintentional consequences for the affected subjects.

To conclude there are three types of Javanese unergative in relation with

transitivity and adversative passive:

- (i) no transitive form and no adversative form: the group consists of ‘true’ unergative verbs that resist any attempts of transitivization
- (ii) transitive form with *-i*, no adversative form: the group consists of verbs that require the volition of the agents to perform the action described by the verb and to affect the affected arguments
- (iii) transitive form with *-i*, adversative form parallel to suffix *-i*: the group consists of verbs that can be transitivized with *-i* and consecutively converted into adversative passive.

7.4 Possessive raising and the representation of Javanese passive

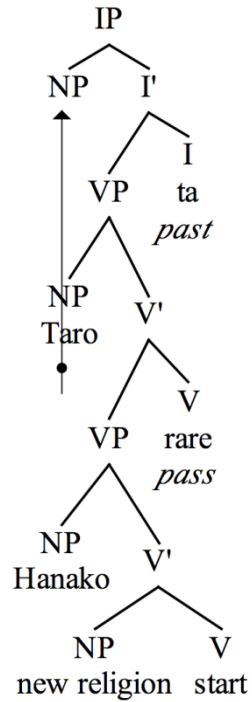
Now I discuss possessive raising. As mentioned earlier, Kubo (1992) and Pylkkänen (2000) propose two different analyses of the adversative passive. Kubo (1992) proposes to distinguish between the regular adversative and possessive raising adversative. The possessive adversity passive is derived by possessive raising and the malefactive construction is derived by a passive morphology introducing an affected argument. In the malefactive construction, the passive morphology is claimed to assign an external Malefactive θ -role.

(202) Regular Japanese adversative

Taroo-ga Hanako-ni shinkoushukyoo-o hajime-rare-ta.

Taroo-NOM Hanako-DAT new.religion-ACC begin-PASS-PAST

‘Taro was adversely affected by Hanako starting a new religion on him’



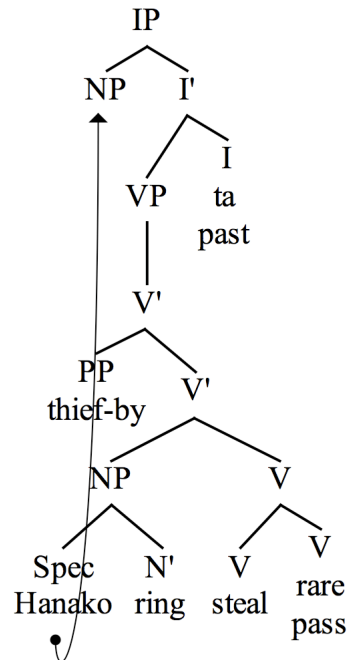
Kubo (1992), Pylkkänen (2000)

(203) Japanese possessive adversity passive

Hanoko-ga dorobou-ni yubiwa-o to-rare-ta

Hanoko-NOM thief-DAT ring-ACC steal-PASS-PAST

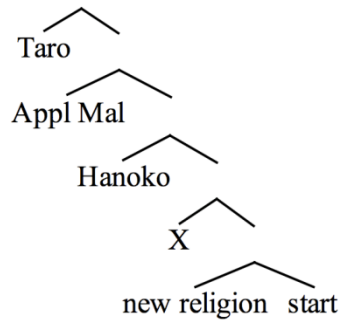
‘Hanoko was affected by the thief stealing her ring’



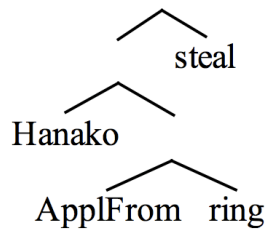
Kubo (1992), Pylkkänen (2000)

Pylkkänen (2000) argues that possessor raising adversative resembles to low applicative by having a possessive relation between the affected argument and the theme argument. On the other hand, the regular adversative resembles the high applicative because of the absence of possessive relation between the affected argument and the theme argument.

(204) Japanese regular adversative



(205) Japanese possessive adversity passive



However, both Kubo (1992) and Pylkkänen's (2000) analyses are problematic for Javanese adversative because (i) the construction does not require an obligatory theme argument, and (ii) the affected argument does not have to possess the theme argument.

(206) No possessive relation between the affected argument and the theme

a. *Parto ke-copet-an duit.*

Parto Adv-steal-Appl money

‘Parto suffered from his money being stolen’

- b. *Parto ke-copet-an.*

Parto Adv-steal-Appl

‘Parto suffered from something being stolen from him’

- c. *Parto ke-copet-an kalung-e Ani.*

Parto Adv-steal-Appl necklace-Poss Ani

‘Parto suffered from Ani’s necklace stolen from him (when he was carrying it)’

Example (206b) shows that the construction does not require a theme argument while (206c) shows that the affected argument need not have a possessive relation with the theme argument. In fact, it can be argued that the possessive relation results from the pragmatic assumptions that under normal circumstances, the affected subject would most likely possess the theme argument. Hence, it is natural to infer that *Parto* is the possessor of the money if it was stolen when he was holding it in (206a). However, this assumption can be reversed in appropriate circumstances.

Second, both Kubo (1992) and Pylkkänen (2000) cannot explain why the possessor raising construction in their framework does not necessary entail malefactive semantics. In Kubo’s (1992) framework, the affected argument in possessor raising is not introduced by the same passive morphology assigning external Malefactive θ -role in the regular adversative passive. In Pylkkänen’s (2000) framework, only the regular adversative passive that carries the malefactive head but not the possessor raising. This is problematic since it is clear that both possessor raising and regular adversative passive in Javanese carry adversative semantics by

bearing the adversative suffix *ke*-.

Third, Pylkkänen (2000) herself points out, treating the possession adversity passive as a low applicative is problematic, since Japanese does not have a low applicative in the active form. It immediately poses a question why the low applicative is only present in the adversative passive form.

Fourth, Pylkkänen (2000) mentions that her framework on adversative passives cannot explain why the agent originates below the applied argument and not at the Voice Phrase for the high applicative. Pylkkänen (2000) argues that the agent is not a true external argument since it lacks structural properties of external argument such as the compatibility with the purpose phrase *wazato*. *Wazato* cannot occur in a DP-internal context since it requires a verbal context and a true external argument.

(207) *Wazato* test of external argument

- a. *Wazato* ‘On Purpose’ cannot occur inside a DP

**Hanako-no zibun-no heya-de-no wazato hirune*

Hanako-GEN self-GEN room-IN-GEN on.purpose nap.NOM

‘Hanako’s nap in her room on purpose’

- b. *Wazato* is only grammatical in a verbal environment

Hanako-ga zibun-no heya-de wazato hirunesi-ta

Hanako-NOM self-GEN room-IN on.purpose nap.PST

‘Hanako napped in her room on purpose’

- c. *Wazato* is not grammatical for high applicative adversative

**Taroo-ga Hanako-ni wazato waraw-are-ta*

Taroo-NOM Hanako-DAT on.purpose laugh-PASS-PAST

‘Taro was adversely affected by Hanako’s laughing on purpose’

It is clear that we need a new framework that can better account for the adversative passive in Javanese.

7.5 Previous framework of Javanese adversative passive

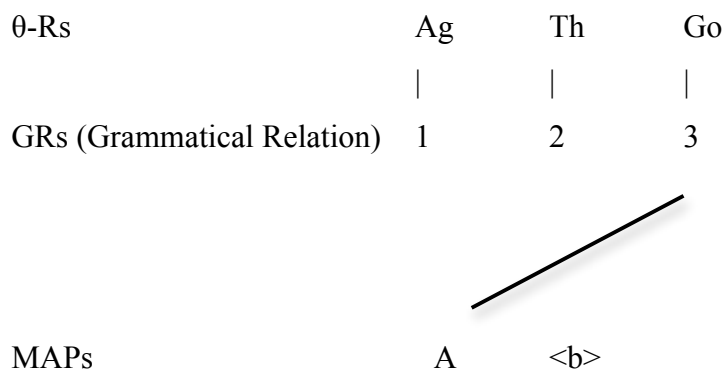
I now turn to the previous framework of Javanese adversative passive. Not much has been done on the formal representation of Javanese adversative passive. One of the few is Davies (1995), who applies Mapping theory, a version of Relational Grammar. Mapping theory representations display four information on an argument: its thematic role, its argument relation, its MAP (morphosyntactically-licensed argument) and its presentation (language particular statement regarding word order, case, agreement). MAPs are ordered position of arguments linked to morphological presentational statements (for example, NOM case licenses A, ACC case licenses B, and DAT case licenses C). Davies analyzes Javanese as a two MAP language since the language exhibits the characteristic of a two MAP language like having a fixed SVO word order (Davies, 1995:26)

(208) Mapping Theory

Siti ke-ciprat-an Bambang banyu panas

Siti Adv-splash-Appl Bambang water hot

‘Siti was accidentally splashed hot water by Bambang’



Javanese is a 2-MAP language; therefore the goal 3 can only be made active by linking it to a MAP. The linking results in the locative morphology *-an* and linking a lower ranking GR to the A MAP triggers passive morphology *ke-*.

It can be observed that Davies' (1995) framework offers an incomplete analysis on the adversative passive. First, the framework claims that the suffix *-an* triggers the passive morphology *ke-*. This is problematic as we saw that the suffix *ke-* does not always co-occur with *-an* in the adversative construction. Second, the framework fails to represent the fact that the bare nominal agent in an adversative passive construction is a remnant of ergative syntax because it only has two types of cases, Nominative and Accusative. Third, Davies's (1995) framework presents the subject of the adversative passive as a goal while it is actually an affectee. Therefore, we need a new framework to represent Javanese adversative passive.

7.6 New representation of Javanese adversative passive

In this section, I propose a new formal representation on Javanese adversative in the generative grammar and minimalist framework. Javanese adversative passive finds a natural interpretation with Bowers' (2010) framework since the affected

argument in the *ke-an* construction can be directly merged in the Affectee head. Moreover, the framework can represent the fact that Javanese adversative involves two syntactic processes, passivization and applicativization.

I start my discussion by incorporating my framework on Javanese passive. As we saw in chapter 5, Javanese passive has three distinct agents in three different positions: (i) a bare pronoun agent at the Spec of Voice, (ii) a bare nominal agent at the Spec of Pr, and (iii) a PP agent merged very low in the derivation at the Ag head. On the contrary, the adversative passive only has one type of agent, the bare nominal agent as seen in (209) with the agent *Bambang* in the immediate postverbal position. The other types of agents are ungrammatical.

(209) Agents of the adversative passive

a. **Surti ke-ciprat-an banyu panas dening Bambang.*

Surti Adv-splash-Appl water hot by Bambang

‘Surti was accidentally splashed with hot water by Bambang’

b. **Surti tak kecipratan banyu panas.*

Surti 1st Sing Adv-splash-Appl water hot

‘Surti was accidentally splashed with hot water by me’

As seen in (209), the PP agent *dening Bambang* and the bare pronoun agent *tak* are ungrammatical for the bare passive. Therefore, I propose that the Agent head of the adversative passive only selects an unmarked DP which then receives an inherent ergative case from the Agent head, unlike the regular passive which can select a PP agent. However, similar to the regular passive, the Ag head and the Pr head carry the features of [+ERG], [-act] that should be checked by the agent. Hence, the agent is

then raised to the Pr head to check the features at the Pr head.

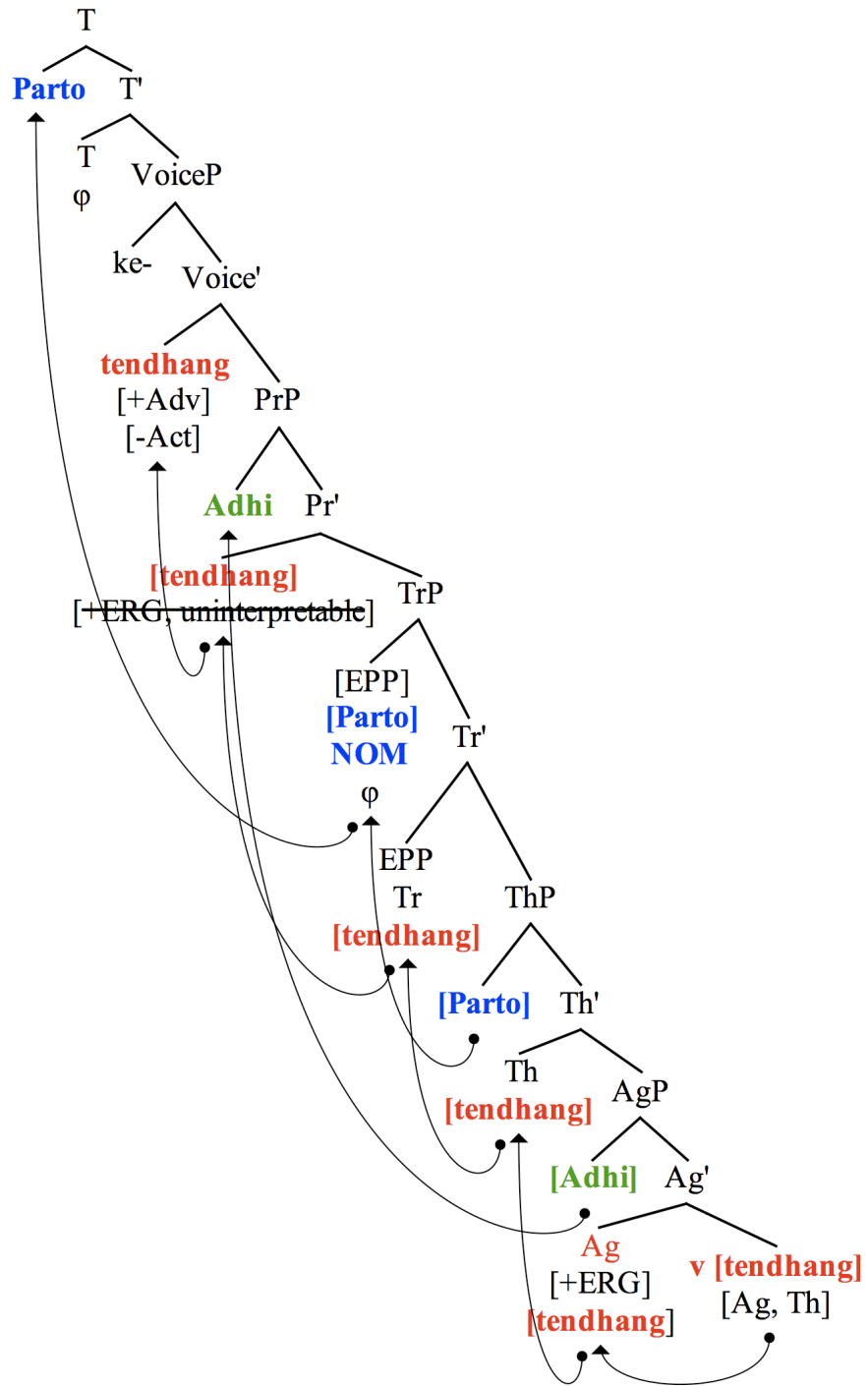
Next I discuss how the semantic content [+adversative] is represented in the derivation. I posit that the Voice head can carry a feature of [+ adversative] which spreads to the whole extended projection. When the feature is present in a clause with transitive verb, the Voice head selects the prefix *ke-* instead of prefix *di-*. On the other hand, the root verb has an a-selection of Agent and Theme and therefore has to undergo movement to the Agent head and the Theme head before moves to the Voice head where it adjoins the adversative prefix *ke-*. In contrast, in a clause with an intransitive verb, an applicative construction occurs, which results in two instances: (i) an Affectee head is merged instead of a Theme head, and (ii) the suffix *-an* is merged at the Affectee head.

(210) Passivization in Javanese adversative passive

Parto ke-tendhang Adhi.

Parto Adv-kick-Appl Adhi

‘Parto was accidentally kicked by Adhi’



In (210), the Voice head carries the feature of [+adversative] which spreads to the extended projection and as a result, the adversative passive suffix *ke-* is merged instead of the passive suffix *di-*. The theme argument *Parto* is raised to Spec of Tr by the pure EPP feature at the Tr head where it is valued Nominative by the probe in T head. Eventually the theme argument *Parto* is raised to the Spec of T.

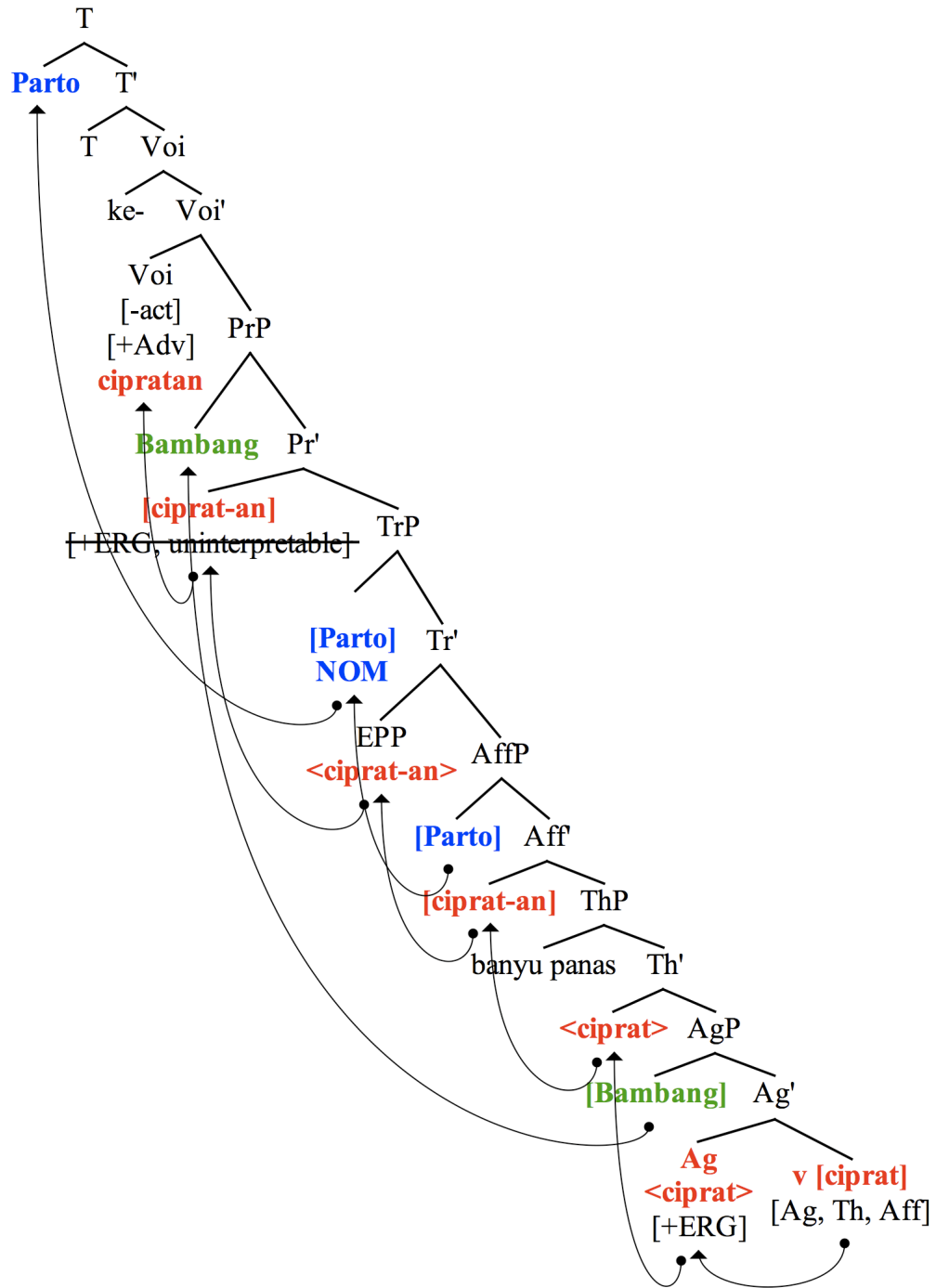
Moreover, since an unvalued argument *Adhi* is merged at the Spec of Ag, the argument receives an inherent ergative case from the Ag head. To satisfy the uninterpretable ergative feature at the Pr head, the DP *Adhi*, which carries interpretable ergative feature, is raised to the Spec of Pr to delete the feature at the head.

Now I turn to intransitive verbs. As we saw earlier, an intransitive verb must be applicativized with suffix *-an* to add an Affectee argument to the construction.

(211) Passivization and applicativization in Javanese adversative passive

<i>Parto</i>	<i>ke-ciprat-an</i>	<i>Bambang</i>	<i>banyu</i>	<i>panas</i>
Parto	Adv-splash-Appl	Bambang	water	hot

‘Parto was accidentally splashed by Bambang with hot water’



It can be observed in (211) that beside passivization, the construction also applies applicativization with suffix *-an*. The suffix is merged at the Spec of Affectee. The verb picks up the suffix through a successive cyclic movement to the argument heads, Tr head and Pr head before finally ends up at the Voice head where it adjoins with the prefix *ke-*.

7.7 Summary

In sum, I show in this chapter that Javanese adversative passive involves two different syntactic processes: applicativization and passivization. I also show that (i) the suffix *-an* in Javanese adversative passive is best analyzed as an applicative suffix introducing an affected argument to the construction, (ii) the possessor raising construction does not exist in Javanese because the affected argument does not have to display direct possession relation with the theme argument, and (iii) split intransitivity does not determine whether a verb can be turned into adversative passive or not. Moreover, I propose that the semantics of Javanese adversative passive entails the volitionality of the agents and the unintentional consequences suffered by the affected subject which can be adversative, neutral, or even pleasant.

Lastly, I show that Javanese adversative passive is best represented with Bowers' (2010) framework because (i) it can take into account the applicativization with suffix *-an* and passivization with suffix *-ke*, and (ii) it can ensure that the feature [+adversative] spreads to the whole projection.

CHAPTER EIGHT

CONCLUSION

The syntax of valence, which includes applicative, passive and adversative passive, has been independently analyzed in a variety of frameworks. Applicative is analyzed as a preposition incorporated to a verb (Baker 1988) or as an applicative suffix merged at a single applicative head (Marantz 1993, Pylkkänen 2002) with little effort to account for the similar argument structure between the applicative construction and its thematic paraphrase. On the other hand, passive voice is commonly represented with totally different derivation from the active voice (Kratzer 1996). Later, there has been an attempt to unify the active and passive voice by Collins (2005) with smuggling of the theme argument to Voice Phrase. However, both of them can only account for the usual *by-phrase* passive. In addition, the adversative passive is represented with two constructions, the common malefactive passive and the possessor raising (Kubo 1992, Pylkkänen 2000).

I show in this dissertation that Javanese proves to be a challenge for the independence analysis of the syntax of valence. First, its applicative suffix *-ake* has multiple functions resulting in the violation of UTAH (Baker, 1988) when lumped in one single applicative head. Moreover, its passive agents can be located in three different positions, preverbal, postverbal and in a *by phrase*-like PP at the end of the sentence. Certainly, this cannot be accounted by previous frameworks on passive which only consider *by-phrase* agent in their analysis. Lastly, against Kubo's (1992) and Pylkkänen's (2000) observation, the possessor subject in Javanese adversative

passive does not have to possess the theme argument and the theme can also be optional.

Therefore, in this dissertation, I propose a new approach which unifies the analysis of the syntax of valence in Javanese for applicative, passive, and adversative passive. I base the new approach on synchronic frameworks, in specific Bowers' (2010) framework of applicative and passive, Merchant's (2013) framework on Voice Phrase and Aldridge's (2011) framework on Indonesian ergativity in passive. I also perform minor diachronic and comparative observation on the nature of the valence-changing processes in Javanese to investigate their functions and identities historically and comparatively.

Bowers (2010) claims that each argument is merged at their specific heads based on the semantic roles of the arguments according to UoM (the universal order of merge). Hence the benefactive suffix *-ake* can be merged at the Benefactive head, the instrumental *-ake* at the Instrumental head, and the theme *-ake* at the Theme head without violating UTAH. Moreover, in Bowers' (2010) framework, the argument head can select a DP with unvalued case feature or a PP. This results in the virtually identical structure for the applicative construction and its thematic paraphrase.

For passive, I also follow Bowers' (2010) framework in that the agent of the passive originates at the agent head at the bottom of the derivation. The agent raises to the preverbal and postverbal position with ergative features. Aldridge (2011) proposes that the subject of the passive and the preverbal agent in Indonesian bare passive share subject properties due to the remnants of previous ergative syntax. Based on that, I further propose that the agent head in Javanese has an inherent ergative case while the

Pr head and the Voice head have uninterpretable ergative features. These features can be deleted by raising the agent to the Spec, Pr or Spec, Voice.

On the other hand, the adversative passive is defined as a construction involving two processes, passivization with the adversative passive *ke-* in the Spec of Voice and applicativization with the applicative suffix *-an* at the Affectee head. The special adversative affixes *ke-* and *-an* are merged when the projection carries [+adversative] feature. Hence, there is only one type of adversative passive involving passivization and applicativization.

The above findings show that a unified approach to account for the syntax of valence offers more advantages than separate analysis. Javanese data shows that a unified approach can solve not only the problems arise from the individual applications of applicative, passive, and adversative, but also problems from their combined applications. As an example, the current framework solves not only the problems of Javanese applicative and passive, but also problems from their combination in the adversative passive. Therefore, it is necessary in the future to expand the current analysis with more samples of languages both related or unrelated to Javanese.

Moreover, it should also be noticed that diachronic and comparative studies can also contribute in the preliminary analysis of the dissertation to understand the nature and functions of the suffixes involved in the valence-changing operations in Javanese. In the future, more comparative analyses should be performed with more related languages which might be useful to verify the group classification of Javanese and its neighboring languages.

REFERENCES

- Adelaar, Alexander. 2005. The Austronesian Languages of Asia and Madagascar: a historical perspective. in *The Austronesian Languages of Asia and Madagascar*. Alexander Adelaar and Nikolaus P. Himmelman eds. pp 1-42. New York: Routledge.
- Adelaar, Alexander and Nikolaus Himmelman. 2005. The Austronesian Languages of Asia and Madagascar: Typological Characteristics. in *the Austronesian Languages of Asia and Madagascar*. Alexander Adelaar and Nikolaus Himmelman (eds.). pp 110-181. Oxon, New York: Routledge
- Adelaar, Alexander. 2011. Tense, Aspect and Mood in some West Indonesian Languages. in *Proceedings of the International Workshop on Tense, Aspect and Mood and Evidentiality in Indonesian Languages*. February 17-18, 2011. Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies, pp 1-14.
- Adelaar, Alexander. 2011. *Javanese -ake and -aken: a short history*. in *Oceanic Linguistics*, Vol. 50, No. 2.
- Aldridge, Edith. 2008. *Phase-based account of extraction in Indonesian*. *Lingua* 118: 1440-1469
- Aldridge, Edith. 2011. *Antipassive in Austronesian Alignment Change. Grammatical Change: Origins, Nature, Outcomes*. Dianne Jonas, John Whitman, Andrew Garrett, eds, 331-345. Oxford University Press.
- Alexiadou and Anagnostopoulou. 1998. Parametrizing AGR: Word Order, V-movement, and EPP checking. in *Natural Language and Linguistic Theory*. 16: 491-539.
- Arka, I Wayan and Chris Manning. 1998. *Voice and Grammatical Relations in Indonesian: A New Perspective*.
- Arps, Bernard. 2000. Indonesian Influence on the Old Javanese linguistic tradition. in *History of the Language Sciences: An International Handbook on the Evolution of the Study of Language from the beginnings to the present*. Sylvain Aroux, E.F.K Koerner, Hans-Josef Niederehe, Kees Versteegh, (eds.) pp. 183-186. Berlin, New York: De Gruyter.

- Baker, Mark C. (1988). *Incorporation: a theory of grammatical function changing*. Chicago: University of Chicago Press.
- Barrs, A. and H. Lasnik. 1986. 'A note on anaphora in double object construction', *Linguistic Inquiry* 17, 347-354.
- Blust, Robert. 2003. *Three Notes on Early Austronesian Morphology*. Oceanic Linguistics, Vol.42, No.2 (Dec., 2003), pp. 438-478.
- Bowers, John. 2002. *Transitivity*. Linguistic Inquiry 33:183-224
- Bowers, John. 2010. *Arguments as Relations*. Cambridge, Mass: MIT Press
- Brown, Colin. 2003. *A Short History of Indonesia: The Unlikely Nation?*. Crows Nest, NSW: Allen and Unwin
- Campbell, George L. 1995. *Concise compendium of the world's languages*. Routledge: Oxon, New York.
- Chung, Sandra. 1976. On the Subject of 2 Passives in Indonesian. *Subject and Topic*. C. Li, ed. New York: Academic Press.
- Cole, Peter and G. Hermon. 1998. *Subject and non subject relativization in Indonesian*. Papers presented at the Symposium of Malay-Indonesian linguistics, Ujung Pandang, Indonesia
- Collins, Chris. 2005. *A Smuggling Approach to the Passive in English*. Syntax 8.2:81-120.
- Connors, Thomas. 2011. *The Indonesian Passives and the Agent Specifications*. Austronesian Formal Linguistics Association VIII. MIT.
- Dardjowidjojo, Soenjono. 1978. *Sentence Patterns of Indonesian*. Honolulu: University of Hawaii Press.
- Davies, William, D. 1998. *Radically local and partial wh-movement in Madurese*. Paper presented at WECOL 1998.
- Davies, William D. (1995). *Javanese Adversatives, Passives and Mapping Theory*. Journal of Linguistics, Vol. 31, No. 1 (Mar., 1995), pp. 15-51
- Davies, William D. and Stanley Dubinski. 2004. *The Grammar of Raising and Control: A Course in Syntactic Augmentation*. Malden, MA: Blackwell.

- Drakeley, Steven. 2005. *The Greenwood Histories of the Modern Nations: The History of Indonesia*. Westport: Greenwood Press.
- Donohue, Mark. 1999. *The Tukang Besi Language of Southeast Sulawesi, Indonesia*. Berlin: Mouton de Gruyter.
- Donohue, Mark. 2001. Coding Choices in Argument Structure: Austronesian Applicatives in Texts, *Studies in Language* 25 (2): 217-54
- Dwiraharjo, Maryono. 2006. Speech Levels in Javanese From a Comparative Linguistic Perspective. in *Austronesian Diaspora and the Ethnogenesis of People in Indonesian Archipelago, Proceedings of the International Symposium*. Truman Simanjuntak, Ingrid H.E. Pojoh, Mohammad Hisyam (eds.). pp. 412-421. Jakarta: LIPI Press.
- Embick, D. .2004. "Unaccusative syntax and verbal alternations" (uncorrected proof).
- Ewing, Michael C. 2005. Grammar and Inference in Conversation: Identifying Clause Structure in Spoken Javanese. Amsterdam and Philadelphia: John Benjamins
- Errington, Joseph. 1998. *Structure and Style in Javanese*. Philadelphia: University of Pennsylvania Press.
- Fagerli, Ole. 2001. Malefactive by means of GIVE. in A cognitive approach to the verb: morphological and constructional perspectives. Hanne Simonsen, Rolf Endresen, eds. pp 203-222. Berlin, New York: Mouton de Gruyter.
- Fergusson, Philip. 2008. Indonesia and East Timor: Cultural Expression: Literature . in *World and its People: Eastern and Southern Asia*. Volume 10. pp 1368-1369. New York: Marshall Cavendish Corporation
- Franco, Jon. 2000. Agreement As Continuum: The Case of Spanish Pronominal Clitics. in *Clitics Phenomena in English and Other European Languages*. Frits H. Beukema and Marcel Den Dikken (eds.). pp 147-190. Amsterdam and Philadelphia: John Benjamins
- Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. The view from building 20. ed. by Kenneth Hale and S. Jay Keyser, 111-76. Cambridge, M.A.: MIT Press.
- Heggie, Lorie and Francisco Ordonez. 2005. Clitic Ordering Phenomena: the Path to Generalizations. in *Clitic and Affix Combinations: Theoretical Perspectives*. Lorie Heggie and Francisco Ordonez (eds.). Amsterdam, Philadelphia: John Benjamins.

- Himmelman, Nikolaus. 2005. The Austronesian Languages of Asia and Madagascar: Typological Characteristics. in *The Austronesian Languages of Asia and Madagascar*. Alexander Adelaar and Nikolaus P. Himmelman eds. pp 110: 181. New York: Routledge.
- Hopper, Paul. 1983. Ergative, Passive, and active in Malay narrative. in *Discourse Perspective in Syntax*. ed by F. Klein-Andreu, 67-88. New York : Academic Press.
- Horne, E.C. 1961. *Beginning Javanese*. New Haven: Yale University Press
- Kaswanti Purwo, B. 1997. The Direct Object in Bi-Transitive Clauses in Indonesian. in *Grammatical Relations: a Functionality Perspective*. T Givon (ed.), pp 233-52. Amsterdam and Philadelphia: John Benjamins
- Kayne, Richard S. 1994. *The antisymmetry of syntax*. Linguistic Inquiry Monograph Twenty-Five. The MIT Press: Cambridge.
- Klamer, Marian. 2002. *Ten years of synchronic Austronesian linguistics (1991–2002)*. Lingua vol. 112 issue 11 November, pp. 933-965.
- Kittila, Seppo. 2010. On distinguishing between recipient and beneficiary in Finnish. in *Grammar from the Human Perspective*. Marja-Liisa Helasvuo and Lyle Campbell, eds. pp 129-152. Amsterdam, Philadelphia: John Benjamins.
- Kittila, Seppo and Fernando Zuniga. 2010. Benefactive and malefactive from a cross-linguistic perspective. in *Benefactives and Malefactives: a typological perspectives and case studies*. Seppo Kittila and Fernando Zuniga, eds. pp 1-28. Amsterdam, Philadelphia: John Benjamins.
- Koentjaraningrat. 1985. *Javanese Culture*. New York: Oxford University Press
- Kratzer, A. 1996. Severing the external argument from its verb. in *Phrase Structure and the Lexicon*, volume 33 of *Studies in Natural Language and Theory*. Dordrecht: Kluwer, pages 109-137.
- Kroeger, Paul, 1993. *Phrase Structure and Grammatical Relations in Tagalog*. CSLI Publications: Stanford.
- Kubo, Miori. 1992. Japanese Passives. *Working Papers of the Department of Languages and Cultures vol.23*. University of Hokkaido.
- Kuno, Susumo. 1987. *Functional Syntax*. Chichago: University of Chicago Press.

- Landau, Idan. 2006. *Ways of Being Rude*. Technical Report. Ben Gurion University: Israel.
- Landau, Idan. 2010. The explicit syntax of implicit arguments. *Linguistic Inquiry*. 41.3: 357-388
- Larson, Richard K. 2010). *On Pylkkanen's Semantics for Low Applicatives*. *Linguistic Inquiry*, Volume 41, Number 4, Fall 2010. MIT Press: pp. 701-704
- Legate, Julie. 2010. *The Structure of Implicit Agents in Passive*. NELS 41, University of Pennsylvania.
- Lewis, M. Paul (ed.), 2009. *Ethnologue: Languages of the World, Sixteenth edition*. Dallas, Tex.: SIL International. Online version: <http://www.ethnologue.com/>
- Lockard, Craig A. 2009. *Southeast Asia in World History*. New York: Oxford University Press
- Malleret, Louis. 1959-1963. *L'Archeologie du delta de Mekong*. 4 vols. Paris: Ecole Francaise d'Extreme Orient.
- Manning, Christopher D., 1996. *Ergativity: Argument Structure and Grammatical Relations*. CSLI Publications: Stanford.
- Marantz, A. 1993. Implications of asymmetries in double object constructions. In *Aspects of Bantu Grammar*. S.A.Mchombo. Stanford, CSLI: 113-150
- Martins, Ana Maria. 2001. Deficient Pronouns and Linguistics Change in Portuguese and Spanish. pp 231-230. in *Romance Languages and Linguistic Theory* 2001. Josep Quer, Jan Schroten, Mauro Scoretti, Petra Sleeman, Els Verheugd (eds). Amsterdam and Philadelphia: John Benjamins.
- McGinnis, Martha. 2002. Object Asymmetries in a Phase Theory of Syntax. in John T. Jensen and Gerard van Herk (eds). *Proceedings of the 2001 CLA Annual Conference*. Cahiers Linguistique D'Ottawa. pp. 133-144.
- McWhorter, John. 2007. *Signs of Non-Native Acquisition in Standard Language Grammars*. Oxford: Oxford University Press.
- Merchant, Jason. 2007. *Voice and Ellipsis*. home.uchicago.edu/merchant/pubs/voice.and.ellipsis.pdf
- Miyake, Yoshimi. 2011. Reduplication in Javanese. *Asian and African Languages and Linguistics*, No.6. pp 45-59.

- Musgrave, Simon. 2001. Non-subject arguments in Indonesian, Ph.D thesis. Melbourne University.
- Nababan, P.W.J. 1979. Languages of Indonesia. in *Papers on Southeast Asian Languages*, T.A Llamzon ed., 257-292. Singapore: Singapore University Press for SEAMO Regional Language Centre.
- Nishiyama, Kunio. 2002. Post-syntactic passivization and the abstract clitic position in Indonesia. AFLA IX. Cornell University, Ithaca. NY.
- Nurhayani, Ika. 2012. Javanese Applicative Construction. in *Coyote Papers: Working Papers in Linguistics Volume 19*. Tucson: University of Arizona
- Oglobin, Alexander. 2005. Javanese. in *The Austronesian Languages of Asia and Madagascar*. Alexander Adelaar and Nikolaus P. Himmelman eds. pp. 590-624. New York: Routledge.
- Oglobin, Alexander. 2012. *Historical Change of the Passive in Javanese*. The 12th International Conference on Austronesian Language, Bali, Indonesia.
- Prasithrathsint, Amara. 2006. Development of the Tuuk Passive Marker. in *Thai passivization and typology: form and function*. Werner Abraham and Larisia Leisio. eds., pp 115-131. Amsterdam, Philadelphia: John Benjamins B.V.
- Paul, Ileana and Lisa Travis. 2006. Ergativity in Austronesian languages. In A. Johns, D. Massam, J. Ndayiragije (eds.). *Ergativity: Emerging issues*. Dordrecht: Springer. 315-336.
- Pawley, Andrew K. and Lawrence Andrew Reid. 1976. *The Evolution of Transitive Constructions in Austronesian*. Extended abstract of a paper presented at the Second Eastern Conference on Austronesian Languages, Ann Arbor, May 4-5, 1976.
- Pawley and Ross. 1993. 'Austronesian Historical Linguistics and Culture History,' *Annual Review of Anthropology* 22: 425-59
- Ricklefs, Merle Calvin. 2002. *A History of Modern Indonesia since C.1200*. Stanford: Stanford University Press.
- Peterson, David A. 2007. *Applicative Construction*. Oxford University Press: Oxford.
- Poedjosoedarmo, Soepomo. 1968. Javanese Speech Levels. in *Indonesia 6*: 54-81. Ithaca. SEAP Cornell University.
- Poedjosoedarmo, Gloria. R. 1986. Role Structure in Javanese. *NUSA Linguistic*

- Poedjosoedarmo, Gloria. R. (2002). *Changes in Word Order and Noun Phrase Marking from Old to Modern Javanese: implications for understanding development in western Austronesian 'focus' systems*. The History and Typology of Western Austronesian Voice Systems. Canberra: Pacific Linguistics, Research School of Pacific and Asian Studies, Australian National University.
- Poedjosoedarmo, Gloria. 2006. The Effect of Bahasa Indonesia as a Lingua Franca on the Javanese system of Speech Levels and their function. in *International Journal of the Sociology of Language*. Volume 2006, Issue 177, Pages 111–121, ISSN (Online) 1613-3668, ISSN (Print) 0165-2516, DOI: [10.1515/IJSL.2006.007](https://doi.org/10.1515/IJSL.2006.007), May 2006.
- Pollock, Sheldon. 1996. The Sanskrit Cosmopolis, 300-1300 CE: Transculturation, Vernacularization, and the Question of Ideology. In *Ideology and Status of Sanskrit: Contributions to the History of the Sanskrit Language*. Jane E.M. Houben eds. pp 197-248. New York, Koln: Brill
- Pylkkänen, Liina. 1999. *The Syntax of Internal and External Causation*. In the Proceedings of the Texas Linguistics Society. 1999 Conference: Perspectives on Argument Structure.
- Pylkkänen, Liina 2002. Deriving Adversity. In *WCCFL 19 Proceedings*. Billerey and Lillehaugen (eds). 339-410. Somerville MA: Cascadilla Press.
- Pylkkänen, Liina. 2008. *Introducing Arguments*. MIT Press: Cambridge, MA.
- Radetzky, Paula and Tomoko Smith. 2010. An areal and crosslinguistic study of benefactive and malefactive construction. in *Benefactives and Malefactives: typological perspective and case studies*. Seppo Kittila and Fernando Zuniga, eds. pp. 97-120. Amsterdam, Philadelphia: John Benjamins.
- Ross, Malcom. 2002. The History and Transitivity of Western Austronesian Voice and Voice-Marking in Wouk, Fay, Ross, Malcom (eds). *The History and Typology of Western Austronesian Voice Systems*. Pacific Linguistics, Canberra, pp. 17-62.
- Sato, Yosuke. 2010. *Minimalist Interfaces: evidence from Indonesian and Javanese*. John Benjamins: Amsterdam, Philadelphia.
- Sneddon, J. 1996. *Indonesian: A Comprehensive Grammar*. London, New York. Routledge.
- Starosta, Stanley. 1999. Transitivity, ergativity and the best analysis of Atayal case marking. In: Zeitoun, Elizabeth Li Paul Jen-kuei (eds). *Selected Papers from the*

- Eight International Conference on Austronesian linguistics. Symposium Series of the Institute of Linguistics, Number 1.* Academia Sinica, Taipei, Taiwan, pp. 371-392.
- Starosta, S., A. Pawley, & L. Reid. 1982. 'The Evolution of Focus in Austronesian'. in *Papers from the Third International Conference on Austronesian Linguistics*, vol.2, A. Halim et al. (eds.), pp 145-70. Oxford: Oxford University Press.
- Southworth, William A. 2004. Indianization. in *Southeast Asia: A Historical Encyclopedia from Angkor Wat to East Timor*. Ooi Keat Gin ed.. pp 642-644. Santa Barbara: ABC-CLIO Inc.
- Subroto, Edi. 1998. Adversative-passive verbs in Standard Javanese. in *Productivity and Creativity: Studies in General and Descriptive Linguistics* in honor of E.M. Uhlenbeck. Mark Janse ed. Berlin. pp 357-368. New York: Mouton de Gruyter.
- Suryadinata, Leo. 2002. *Elections and Politics in Indonesia*. Singapore: Institute of Southeast Asian Studies.
- Teselkin, A.S. 1972. Old Javanese Kawi. in *Translation Series of Modern Indonesia Project*. John M.Echols translator and editor. Ithaca: Southeast Asia Program of Cornell University
- Tsuboi, Eijiro. 2010. Malefactivity in Japanese. in *Benefactives and Malefactives: a typological perspectives and case studies*. Seppo Kittila and Fernando Zuniga, eds. pp 419-435. Amsterdam, Philadelphia: John Benjamins.
- Tsuboi, Eijiro. 2010. Malefactivity in Japanese. *Benefactives and Malefactives: Typological Perspective and Case Studies*. Fernando Zuniga and Seppo Kittila. Amsterdam, eds. Philadelphia: John Benjamins Publishing. 419-433.
- Uhlenbeck, E.M. 1950. *The Structure of the Javanese Morpheme*. *Lingua* 2, 293-70.
- Uhlenbeck, Eugenius Marius. 1970. The Use of Respect Forms in Javanese. in *Pacific Linguistic Studies in Honour of Arthur Chapel*. S.A. Wurm & D.C. Laycock, eds.. pp 441-446. Canberra. ANU
- Uhlenbeck, E.M. 1978. *Studies in Javanese Morphology*. Martinus Nijhoff: The Hague
- Valenzuela, Pilar. 2010. Applicative Construction in Shipibo-Konibo. in *International Journal of American Linguistics*. Vol 76, no.1. pp 101-144. Chicago: The University of Chicago Press
- Vamarassi, Marit Kana. 1999. *Grammatical Relations in Bahasa Indonesia*. Canberra

: Pacific Linguistics, Research School of Pacific and Asian Studies

Zoetmulder, P.J. and I.R. Poedjawijatna. 1961. *Bahasa Parwa: Tata Bahasa Djawa Kuno*. Jakarta: Obor.

Zoetmulder, P.J. and I.R. Poedjawijatna. 1967. *Bahasa Parwa: Tata Bahasa Djawa Kuno II*. Jakarta: Obor.

Zoetmulder, P. J. 1982. *Old Javanese–English Dictionary*. 's-Gravenhage: Martinus Nijhoff.

Zoetmulder, P.J. 1983. *De taal van het Adiparwa: Een grammaticale studie van het Oudjavaans*. Dordrecht (Netherlands)/ Cinnaminson (N.J.) : Foris Publications.

Zurbuchen, Mary S. 1976. *Introduction to Old Javanese Language and Literature: A Kawi Prose Anthology*. Alton Becker, John Musgrave, George Simmons, Thomas Trautmann (eds.). Ann Arbor: Center for South East Asian Studies, The University of Michigan.

Zwicky, A.M. and Pullum, G.K. 1983. *Cliticization and Inflection: English n't*. Language, 59 (3). 502-513.

<https://www.cia.gov/library/publications/the-world-factbook/geos/id.html>